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Enhanced job performance: a new role for military compensation

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THESIS

ENHANCED JOB PERFORMANCE: A NEW ROLE FOR MILITARY COMPENSATION

by

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June 2000

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This study concentrates on aspects of military and civilian compensation that motivate employees and provide incentives upon which job performance and productivity may depend. The study achieves its end by applying successful attributes of civilian compensation to military remuneration systems. Its main purpose is to judge whether military pay is structured toward a modern view of performance-based compensation and whether it is comparable to civilian pay. At issue is a military pay system that is anchored to principles of institutionalism and paternalism. Instead of paying workers according to their respective contribution, the military continues to use a compensation system as old as the military itself. That is, it tailors compensation to a force of unskilled personnel serving as seaman and foot soldiers. In the twentieth century, as technological developments demand a skilled military force that calls for a greater percent of highly trained technicians, specialists, and craftsmen, focus upon compensation structures may prove critical. Hence, the need to assess military pay systems, which is the primary determinant of the price of military manpower, is all the more pressing.

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ENHANCED JOB PERFORMANCE: A NEW ROLE FOR MILITARY COMPENSATION

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ABSTRACT

This study concentrates on aspects of military and civilian compensation that motivate employees and provide incentives upon which job performance and productivity may depend. The study achieves its end by applying successful attributes of civilian compensation to military remuneration systems. Its main purpose is to judge whether military pay is structured toward a modern view of performance-based compensation and whether it is comparable to civilian pay. At issue is a military pay system that is anchored to principles of institutionalism and paternalism. Instead of paying workers according to their respective contribution, the military continues to use a compensation system as old as the military itself. That is, it tailors compensation to a force of unskilled personnel serving as seaman and foot soldiers. In the twentieth century, as technological developments demand a skilled military force that calls for a greater percent of highly trained technicians, specialists, and craftsmen, focus upon compensation structures may prove critical. Hence, the need to assess military pay systems, which is the primary determinant of the price of military manpower, is all the more pressing.

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LIST OF ACRONYMS AND ABBREVIATIONS

AVF	All-Volunteer Force
BAS	Basic Allowance for Subsistence
BHA	Basic Housing Allowance
BLS	Bureau of Labor Statistics
BMC	Basic Military Compensation
CG	Coast Guard
CBO	Congressional Budget Office
CPI	Consumer Price Index
DECI	Defense Employment Cost Index
DoD	Department of Defense
DOPMA	Defense Officer Personnel Management Act
ECI	Employment Cost Index
GAO	Government Accounting Office
GNP	Gross National Product
IRA	Individual Retirement Account
JTPA	Job Training Partnership Act
MRF	Military Retirement Fund
NMS	National Military Strategy
NPGS	Naval Postgraduate School
OASDHI	Old-Age, Survivors, Disability & Health Insurance
OOA	DoD, Office of the Actuary
QDR	Quadrennial Defense Review
QRMC	Quadrennial Review of Military Compensation
RMA	Revolution in Military Affairs
RMC	Regular Military Compensation
SBP	Survivors Benefit Plan
S&I	Special and Incentive
TSP	Thrift Savings Plan
USA	United States Army
USAF	United States Air Force
USMC	United States Marine Corps
USN	United States Navy
WWI	World War I
WWII	World War II

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I. INTRODUCTION

Ever since I was a boy I have wished to write a discourse on compensation; for it seemed to me that life was ahead of theory and the people knew more than was taught.

-Paraphrased from Ralph Waldo Emerson, 1904

A. BACKGROUND

Paying workers according to contributions they provide their employers has long been a fixture of the free enterprise system. For most Americans in the active labor force, the rules and forces of the free market determine their wages, salary, and compensation. However, United States military compensation relies heavily on principles of seniority, rank, and equity, rather than long-held civilian remuneration goals of productivity and performance. Although the military compensation system provides differing pay schemes and packages, it focuses more on retaining employees and ensuring competitive accession rates. This thesis focuses on military and civilian remuneration methods relating to job performance and productivity. This thesis also focuses specifically on current military compensation and its ability to achieve the greatest application of effort, performance, and productivity from its participants. It also addresses incremental changes to the current military system that may provide cost savings to the Department of Defense (DoD) while also providing its members with short- and long-term financial security. Finally, this study will analyze the possibility of compensation effecting enhanced job performance of active-duty personnel.

There is a growing consensus that compensation programs for employees in the public sector are not working. Workers get paid, but reward programs often do not meet the needs of their employer. But with mushrooming interest in reinventing government, cutting costs, and enhancing public sector performance, those who believe in initiating change—the leaders of the revolution—have come to realize that pay programs can either be a part of the problem or a tool in its resolution (Risher and Fay, 1997, p.1).

The internal and external competitive military wage system has long been, and remains, a critical issue concerning retention. The success of military pay is judged solely upon military retention and accessions. Military and civilian advocates argue that service members should receive pay commensurate with civilian sector levels. The advocates also state that 1982 was the last year military and civilian compensation was equal. Current Bureau of Labor Statistics (BLS) pay reports have civilians out-earning military personnel by 13 percent. During the last two years, the U.S. Congress and President have embarked on an effort to equalize pay through increased cost-of-living adjustments combined with increased pay for specific military occupational specialties and year-groups. Insufficient funding of military cost-of-living adjustments, dating back to the early 1980s, they claim, is to blame for the gap. (CBO, Section 2, p.2) The idea of performance related pay has not been injected into the debate when military pay adjustments, increases, or modifications are made.

During an on-going effort to reduce government and specifically defense expenditures in 1993, President Clinton sought a series of limits on military pay increases. His proposal was initiated despite a reported 13 percent "pay gap between military and civilian sectors between the years 1982 and 1992, using the Bureau of Labor Statistics Employment Cost Index (ECI)." (AFA, 1998, p.1) The ECI is an index used to set military pay increases rather than the well-known Consumer Price Index (CPI), a customary measure of cost of living. "Although reports are not always clear about what the government means by pay gap, many people apparently accept the term at face value as an indication that service members earn less than workers of similar civilian jobs or less than they would earn as civilians." (CBO, Section 2, p.1) With the exception of military pay raises in 1981, 1982, 1998, and 1999, Congress has not authorized significant pay increases since 1977. The neglect of pay raises over time has caused the cumulative gap to exceed 13 percent currently. Fiscal Year 1999 and 2000 Department of Defense (DoD) Authorization Acts included a 2.8 percent pay increase, effective 1 January 1999 and a 4.8 percent increase in 2000, including additional increases for some year groups. These pay raises tighten the gap to a reported 11.5 percent by the end of

Fiscal Year 2001. During the long and often heated debates, Congress concluded that military pay should not only be adjusted for inflation and cost of living, but also relative to trends in civilian pay. Therefore, Congress attempts to tie military pay raises to average private sector wage increases using ECI. The increase suggests that legislators recognize the need for parity between military and private sector pay. The parity between civilian and military compensation ends, however, when performance-based compensation is introduced. The relative forms and function of military compensation and civilian sector wages are never matched; only the indexed difference is addressed.

Military retirement benefits may also influence job performance and productivity, but a direct linkage between the two has never been formally discussed in Congress or academia. Congress implemented a common military retirement system for both officers and enlisted personnel in 1947 (U.S. DoD, p.470). The military retirement benefit package, vested upon 20 years of active service and payable for life to those who qualify, is funded entirely by the government. Military retirement, when combined with post-secondary education packages, is the most significant recruiting and retention enticement for the all-volunteer force (AVF). The "extraordinary demands" placed upon service members, during the course of their careers, are the stated justification for retirement benefits and serve as deferred compensation. Starting 1 October 1984, Public Law 98-92 established a normal cost funding method for the military retirement system entitled Military Retirement Fund (MRF). Under law, the Department of Defense pays normal costs of MRF and the Treasury Department makes additional payments from revenues for the unfunded liability that may exist at any given time. (Asch, 1996, p. 1) The primary purpose of military retirement has been to attract and retain individuals. However, the idea of implementing a long-term compensation system to influence, or exhort, enhanced job performance has been neglected.

Quoting Asch's study, MacDonald points out, "military advocates and leaders argue that current military pay structures affect services' ability to recruit and retain the required number of high-quality personnel for a full career." (MacDonald, 1998, p.2) This thesis takes Asch's point one step further by researching how military pay structures

neglect possible gains from increased individual job performance. MacDonald continues, "they argue further that the military cannot hire technically qualified personnel from the private sector for necessary technical sub-specialties." Also, "the military cannot recruit top managers or commanders from the civilian sector due to internal labor market mandates." Instead, individuals must be developed from the early days of recruitment and then promoted through the higher ranks (primarily upon past performance). The nature of military life and the required skills, thought to be unavailable in the civilian sector, are reasons for non-lateral entry. Features of the military personnel administration system recognize the capacity to perform at higher levels being dependent upon experience and training at lower echelons. (MacDonald, 1998, p.3)

The military, not surprisingly, already incorporates a robust system of special and incentive pays (S&I) and seems to understand its vital role in force management. Harris states that:

> S&I pay enable the nation to provide an acceptable compensation level to obtain the majority of the required force and target extra compensation to essential personnel. The fact is 43 percent of military personnel receive at least one type of S&I pay. If the armed forces could provide only basic pay to attract the military force, the pay would have to be set high enough to attract the 43 percent that are paid special pays. Setting the base pay that high would result in over paying the remaining 57 percent of the force that would have enlisted at the lower rates (also known as "economic rent"). The S&I mechanism provides a lower overall manpower cost by targeting specific occupations for retention. (Harris, 1994, p.58)

Applying S&I pays to defined job performance has been ignored and left unexplored regardless of possible benefits it may have upon force size. This could be an important omission because a force containing individuals performing at higher levels can be smaller than a lower performing force and obtain similar output.

New emphasis on employees being regarded as assets, or "material" resources, combined with a vigorous focus on cost reduction, places DoD in a challenging position regarding military manpower remuneration. One way to address both requirements (asset

enhancement and cost reduction) is through flexible compensation schemes. Pay-for-performance or variable-pay, linking bonuses to specific job performance, or completion of specified goals assigned to individuals, teams, or units, is explored in this thesis. Concepts of variable-pay have recently taken on a new vitality, advancing in other countries besides the United States and covering a much broader spectrum of workers. Although reasons often center on cost reduction, effects of increased job performance and productivity have been reported. Civilian organizations frequently combine several different schemes to reward, or incentivize, different kinds of achievement, or behavior, and then find these techniques simply seem to work. (Cairncross, 1999, p.1)

B. OBJECTIVE

The object of this thesis is to examine current military and civilian compensation systems. This examination, through comparisons and contrasts, focuses on relationships between incentive pay, individual performance, and organization productivity. A foundation of research, an assessment of current military compensation, and a discussion on compensation's influence upon worker effort support the argument. The assessment of military pay is undertaken from a historical vantage point.

C. RESEARCH QUESTIONS

Primary research questions are: What positive aspects of civilian employment remuneration may be transferred to current military compensation systems? What is the feasibility and possible outcome of incorporating performance-based compensation within current military compensation systems?

Secondary research questions include:

- What is the purpose of military compensation?
- What is the current structure of the military compensation system?
- How is labor "productivity" defined in the military?
- What are individual performance standards, in a general sense, for military personnel?

- What are group or unit performance standards in the military?
- What are current tools for employee motivation in the military?
- What are current tools for employee motivation in the civilian sector?
- How can military compensation be modified to focus more on, and result in, increased job performance?
- Will performance-based compensation systems influence military retention, attrition, or enlistment rates?
- Will performance-based compensation differ in wartime versus peacetime?
- Can lessons learned from civilian sector compensation methods be applied to military compensation systems?

D. SCOPE LIMITATIONS

This thesis reviews military and civilian remuneration systems, pay techniques, and retirement funding. It examines current DoD pay structures and compares it with equivalent private sector employment. It discusses new opportunities for incentivized pay schemes and the benefits that may be provided military members. Additionally, it reviews the concept known as "pay gap" and discusses its ramifications on the AVF. Specifically, it addresses whether current pay systems are sufficient to provide service members with adequate guidance, security, and motivation to complete their terms of service while expending the greatest effort in the short- and long-term. Finally, this thesis explores how changes to systems might impact force structure, retention, accession, motivation, and the propensity of those people affected by the change to simply work harder.

E. LITERATURE REVIEW

The effect of compensation on worker effort is the basis for all referenced literature. Little research has been conducted on the proposed "cause and effect" of military compensation on individual performance. However, a sophisticated analysis of

pay-for-performance has been performed for civilian firms and non-profit private organizations. Because a pure match between military and civilian employment is daunting,[1] comparisons between military and civilian organizations cannot be easily assumed. Therefore, great care was taken when matching civilian firms that use a performance-based remuneration system, to the military. While researching the subject, three areas of literature were discovered concerning the influence of compensation on worker performance: (1) references centering on piece work with commensurate pay levels; (2) research analyzing the use of pay bonuses or "stock options" awarded at the end of a predefined time period; and (3) pay connected to performance evaluations under more subjective terms and occurring during a predefined, time-sensitive, performance review period. This thesis focuses primarily upon the third type of research, that being pay based on performance defined by an evaluator's perception. This focus is due to the uncanny resemblance of this system to the military's performance evaluation system. As such, the literature review is skewed toward this type of research and is broken down into three additional categories: qualitative research, quantitative research, and general reference material.

1. Quantitative Analyses

Six works, using a quantitative approach, were reviewed in studying pay for performance in the military. Reviewing relationships between incentive pay, organization, and individual performance, Bloom and Milkovich stand above all others in quantitative research and analysis. They state that:

> Results suggest that organizations facing higher risk do not place greater emphasis on short-term incentives than other organizations–rather, they place less emphasis on them. Also, higher-risk firms that rely on incentive

[1] The military exists primarily in what is known as an internal labor market. This fact, combined with other significant elements such as danger of duty and profoundly different legal and hierarchical systems, makes broad reaching comparisons between military and civilian firms a challenge.

> pay exhibited poorer performance than higher-risk firms that did not emphasize incentive pay. (Bloom and Milkovich, 1998, p.283)

Two additional, but separate quantitative studies on public sector performance and incentives were conducted by Michael Cragg, of Columbia University, and Laura I. Langbein, et al. Langbein states that "governments compare equivalent jobs while economists compare equivalent workers." (Langbein, 1998, p.391) This, they think, is where disagreements between public and private pay exist. Langbein et al, applied an economist's model of salary determination to statistically equivalent jobs. In one case, electrical engineers in the public and private sector were used.

The third quantitative study, conducted by Cragg, reviewed the Job Training Partnership Act (JTPA), gleaning evidence as to why performance-based pays are not used in the public sector. He states:

> Theoretical explanations for their limited use (performance pay) are that agents' risk aversion limits the effectiveness of performance incentives, and moral hazard[2] can restrict the efficacy of performance incentives if the performance measures do not fully reflect program goals.... (This) provides empirical evidence for the notion that unless performance standards are carefully designed, problems of moral hazard may preclude the widespread use of performance incentives in government programs. (Cragg, 1997, p.147)

Edward P. Lazear and Thomas J. Carter conducted two additional quantitative works. The two separate works encompass effects of performance compensation within civilian firms. Lazear's study analyzed a firm who changed its compensation system from an hourly wage rate to piece rate. He theorized that those firms might experience average productivity increases and attract a more "able-bodied" workforce. His theories were supported by the following testimony: "in the firm examined, the productivity effects were extremely large, amounting to anywhere from 20 to 30 percent increases in

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[2] If individual performance is rewarded in such a way that comparisons are made to the performance of other workers, then there may be some incentive to direct effort at subverting the performance of other workers rather than increasing one's own level of performance. One can envision this happening, for example, in competition for promotion. (8th QRMC, 1997, p.27)

output. Half of the worker-specific increases in productivity were passed on to workers in the form of higher wages." (Lazear, 1996, p.i) Lazear's work on productivity, in relation to pay suggests a direct causal relationship. However, when analyzing pay for performance, he does not account for self-selection. Self-selection is the traditional stumbling block to making the case that pay for performance works for *all* employees in *all* situations. Carter takes a significant step toward overcoming the self-selection obstacle and its existence in pay-for-performance firms. Carter found:

> Firms may pay efficiency wages to enhance productivity. The conventional presumption is that efficiency wages are inefficiently high because they lead to unemployment that is also inefficiently high; government policies that lower wages raise output. Using a simple and general efficiency wage model, this paper [Carter's] finds a necessary and sufficient condition for the opposite conclusion. If the condition holds, wages are inefficiently low, leading to productivity that is also inefficiently low. It is the high wage policies that raise output, even if they also lower employment. Published empirical results support the condition. No evidence is found for the conventional presumption. (Carter, 1999, p.594)

2. Qualitative Analyses

Qualitative research, although not possessing the perceived strength of quantitative analysis, still has a place in hypothesis resolution. This thesis used numerous studies based upon qualitative analysis and research. Four studies possessing special attributes germane to pay for performance in the military were used. Studies were further broken down into two general categories: research and thought pieces. Within the research subcategory, Charles Moskos and Richard Hodgetts present individual pieces based upon anecdotal evidence. In Moskos' work, he analyzed the AVF to determine whether it possesses characteristics of a "calling, profession, or occupation." Moskos thinks "the evidence is persuasive that current trends are moving the armed forces of the United States toward the norms and structures of an occupation." (Moskos, 1977, p.7) The second anecdotal piece was an interview by Richard Hodgetts with Donald Hastings of Lincoln Electric Corporation. The interview was a discussion of incentive

compensation within Lincoln Electric, "best known for its outstanding productivity incentive programs." Donald Hastings, the recently retired chairman of Lincoln Electric, discussed, in detail, the company's compensation philosophy. In order to maintain the company's foundation beliefs, he states, "the entire system was designed around the philosophy that if people are given the opportunity to succeed, they will take it." (Hodgetts, 1997, p.60)

Two additional qualitative resources, grouped as "thought pieces," or position papers, were also used. The first, by Asch and Warner, discussed the military as an internal labor market. The second, by Thomas Tudor et al, discussed performance appraisals and their relationship with pay for performance. Asch and Warner present a well-researched discourse arguing that the military operates in an internal labor market. They go on to state that the military serves as the premiere illustration of how internal labor markets operate. Tudor opines that "performance appraisals are critical to a company's continued success, in that they allow a company to retain (and reward) strong performers and provide poor-performing employees with guidance on how to improve." (Tudor, et al, 1996, p.41) Tudor also states that human resource departments will grow in importance as private industry realizes pay for performance ensures competitiveness and success throughout.

3. Significant Baseline References

Baseline references serve as the foundation for other literature resources. The baseline references consist of factual encyclopedias and storehouses of knowledge on trends, issues, and debates on compensation. Five works serve as referenced baselines for this thesis. The five pieces were further categorized into two groups: classic reference and compilation type.

The first category of baseline reference is classic references. A textbook by Albert A. Robbert, et al, served as an excellent source of conventional wisdom in the field of military human resources. Robbert, et al, used numerous Quadrennial Reviews of Military Compensation (QRMC) as well as Quadrennial Defense Reviews (QDR) as his

primary references. Robbert, et al, quoted President Clinton in summing up the purpose and objective of their seminal work:

> The QRMC, conducted from 1995 to mid-1997, was chartered by President Bill Clinton to "look to the future and identify the components of a military compensation system that will attract, retain, and *motivate* a diverse (military) work force of the 21st Century" (Clinton, 1995). (Robbert, 1998, p.iii)

Providing data on background statistics, legislative enactment, and information warehouses of military compensation, is a work by the Department of Defense entitled, *Military Compensation Background Papers.* The book presents full legislative and regulatory histories of the various elements of military compensation. It also includes five-year cost outlays for each identified element, or compensation category, existing throughout American military history (U.S. DoD, 1991, p.iii-xii).

Asch and Warner state, "a primary goal of military compensation is to enable the military to meet its manning objectives for force size, composition, and wartime capability." To attain these objectives, "compensation must be appropriately structured to attract, retain, and motivate personnel at a reasonable cost, even when national security goals are changing." (Asch and Warner, 1994, p.iii) They explore myriad ideas with their comprehensive work on military compensation theory and personnel policy. Serving as an energetic source of knowledge on issues of pay and the numerous objectives it serves in a workforce, Asch and Warner provide a sound base in explaining the general theory of military pay.

The second category of baseline research is compilation type. Commander David J. MacDonald, USN, wrote a useful thesis articulating that military compensation requires "streamlining." He addressed his hypothesis by reviewing military compensation's numerous problems from a historical perspective and provided reasonable recommendations for its future improvement. (MacDonald, 1998, p.131) The final reference used in compilation type was congressional testimony from noted experts in the field of civilian and military compensation to the Subcommittee on Military Personnel,

Senate Armed Service Committee, of 3 March 1999. U.S. Senator Wayne Allard (R-CO), Chairman, proclaimed:

> I hope, during this hearing today, we can focus on how we can work together to craft a pay and compensation package that will be attractive to potential recruits, as well as those who are serving today. I'm anxious to hear from my witnesses about the various pieces of (legislation) and the administration's proposal—not to pick it apart—but to see how we can come up with a comprehensive compensation program that will enrich military readiness and improve the quality of life for our service members and their families. (Senate Armed Service Committee, 1999, p.3)

Baseline references keep all other theories concerning compensation, especially military compensation, grounded. Through baseline references and extensive fact compilation, the cause and effect components of pay could be applied. Therefore, a narrow focus was achieved by way of the five works explained above.

4. Summary of Literature Review

Table 1.1 summarizes the significant studies, research, and analyses used in this literature review.

Table 1.1. Summary of Literature Review

Author	Type	Explanatory Variables	Significant Variables/findings
Asch and Warner	Reference	Force size and composition	Models and theory
Asch and Warner	Quantitative (Simulation)	Historical perspective and comparative analysis	Model and simulation
Bloom and Milkovich	Quantitative, agency-based research	Managerial compensation, role of risk, short-/long-term incentives	Organizational structure, risk related to incentives
Carter	Quantitative, efficiency wages	Efficiency and wage setting	Unemployment, elasticity, wage laws
Cragg	Quantitative, JTPA	Performance-based contracts, moral hazard, management systems	Design of performance standards, incentives
Department of Defense	Reference	Historical perspective	Trends and Issues, legislation
Hodgetts	Qualitative, interview, case study	Perceived alternatives, employee benefits, productivity measures	Low worker turn-over, rewards versus punishment, bonuses
Langbein and Lewis	Quantitative	Equivalent jobs and workers, public and private differences	Pay gap, productivity, expectancy theory, equivalency
Lazear	Quantitative, civilian piece work	Hourly wages versus piece rate, utility, compensation, output rates	Profitability, quality, average output between workers
MacDonald	Reference, NPGS Thesis	Streamlining military compensation	Overview of civilian/military pay
Moskos	Qualitative	AVF	Typology
Robbert and others	Reference	Human Resource Management	Literature review and general concepts
Tudor, and others	Qualitative, anecdotal	Performance appraisals, pay-for-performance, human resource interactions, and recent trends	Organizational objectives, feedback, competitive spirit
U.S. Senate Hearing	Reference, interview	Current issues and arguments, expert testimony	Budgeting, incrementalism, and government compensation

Source: Author

F. RESEARCH METHODOLOGY

Thesis data were obtained from a comprehensive search of books, government publications, periodicals, journals, internet resources, and interviews. Books and journals authored by experts in the fields of worker compensation, motivation, and productivity were emphasized. Emphasis was also placed upon General Accounting Office reports, Employment Benefit Research Institute publications, Department of Defense publications, and publications from independent institutions involved in efforts to improve and understand DoD policy and decision making. In all cases, comparisons were made between trends in civilian and military compensation. Information concerning civilian compensation was collected from publications, articles, journals, interviews, and internet sources providing data on a broad spectrum of related issues. While studies in compensation's influence on military worker performance were scarce, research on civilian worker performance was in abundance.

Methodology for research included seven steps:

1. A search of books, magazines, professional journal articles including internet-based data sources, and other library information resources concerning pay for performance. This step was continuously employed throughout the research project.

2. A review of *traditional* compensation schemes in the military and civilian sector.

3. A review of *current* compensation systems within the military and remuneration trends in the civilian sector.

4. An interview process with noted experts in the field of military compensation and with workers who have retired from military service, but who are currently employed in jobs using pay-for-performance.

5. A baseline assessment documenting compensation components, performance components, and influences they may have upon worker motivation.

6. An identification of potential compensation, performance, and motivation compatibility issues.

7. A proposal for military performance-based compensation using current and traditional perceptions of military service.

G. ORGANIZATION OF STUDY

This thesis is divided into six chapters arranged as follows:

I. Introduction

II. Overview of Current Military Compensation

Chapter II presents an overview of military compensation and its evolution from traditional to present-day schemes. It describes elements and reasons for the current approach to military pay. Further, it establishes that regular military compensation (RMC) should be competitive and equivalent to civilian pay packages and methods. This chapter presents three central issues with the current military pay system:

1. The general neglect of short-term performance-based incentives within military pay structures.

2. Marked differences in compensation among service branches within DoD and within occupational fields or ratings.

3. The existence of unfavorable trends created and maintained by a "pay gap" between civilian and military compensation levels.

Further, this chapter addresses the complexity of current uses of bonus and incentive remuneration, as well as internal labor market economics within the military.

III. Overview of Current Civilian Compensation

Chapter III describes, in broad terms, basic structures, benefit formulas, and retirement plans within the civilian sector. Also presented and discussed are numerous studies on pay for performance in the civilian sector. A review of civilian sector compensation systems and its influence upon employee effort is also presented. This

chapter also serves as a foundation allowing comparison with military compensation in chapter IV. This chapter presents these facts in a five-part interrelated format:

1. Direct civilian compensation techniques
2. Indirect civilian compensation techniques
3. Defined benefit formulas for civilian remuneration
4. Defined retirement formulas
5. Pay for performance in the civilian sector

Additionally, chapter III addresses the complexity, effectiveness, and efficiency of current civilian compensation frameworks in terms of bonuses and incentive pays.

IV. The Bridge between Civilian and Military Compensation

This chapter sets the stage for more argumentative portions of the thesis, that being the application of civilian remuneration successes to military institutions. In articulating a "bridge" between civilian and military pay, assumptions that civilian compensation techniques are interchangeable with military are presented. An in-depth review, explanation, and discussion of military compensation, within a civilian framework, is also addressed. Presentation of new approaches to annual pay adjustments, current military compensation issues, and theories of market or institutional approaches are described. Further, discussions on military recruiting and retention and their relationship to compensation are also presented. Finally, a brief introduction to the conventional wisdom of military service existing as a calling, profession, or occupation is debated.

V. Performance-based Compensation in the Military

Introducing the possibility of restructuring military pay toward a performance-based system requires detailed clarification. This chapter begins with a historical view of incentives in the military. Analyzing time periods during major combat actions of the U.S. military from World War I (WWI) to World War II (WWII) and then Vietnam establishes historical frameworks. Identification of current military incentives combined

with discussions of their possible disregard of productivity and performance is also addressed. The next portion of the chapter explains traditional performance measures employed by the military, and in so doing, targets those measures that may be inconsequential to actual worker performance. A discussion then follows on the transformation from conscription to the AVF and its impact on the importance of incentives. Once all variables, ideas, and trends pertaining to military compensation have been identified, a discussion follows on performance measures in the military. Finally, linkages are articulated between the integration of incentives and worker performance in the military. The chapter finishes with a broad-based proposal presenting a performance-based compensation scheme for the military.

VI. Conclusions and Recommendations

In light of what has been discussed in previous chapters, Chapter VI presents possible consequences, intended and unintended, of adopting pay for performance in the military. It provides recommendations for changes to portions of the military compensation system; providing remuneration based more upon performance, productivity, accountability, and responsibility instead of longevity. It then examines the effects of such adjustments on force structure and recommends solutions to current and prospective issues inherent in the "new" military compensation structure.

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II. OVERVIEW OF MILITARY COMPENSATION

The excellence of our military is the direct product of the excellence or our men and women in uniform. This bill invests in that excellence. It authorizes a comprehensive program of pay and retirement improvements that add up to the biggest enhancement in military compensation in a generation...Time and again our military personnel have delivered for our country. Today, America delivers for them.

-President Clinton. Upon signing the FY 2000 National Defense Authorization Act (1999)

A. INTRODUCTION

The U.S. armed services use a compensation system based upon rank (pay-grade) and seniority (time-in-service). Unlike civilian sector pay, which is based on work quantity, quality, and performance, military pay is geared largely to equity, longevity, and quantity.[3] True, some military compensation fixtures consist of factors outside of rank and seniority; an assortment of duty related pay, special allowances, and entitlements are also used. Additional compensation for military members can also rest on the number of dependents (family members) an individual possesses, region or country of domicile, and special duties that might incorporate greater degrees of danger or special skill. For ease of explanation, four major components of military pay are commonly referred to as basic pay, quarters and subsistence allowances, bonuses or incentives, and tax advantages.

B. HISTORICAL ATTRIBUTES

Compensation has always been an important element of military service. Extrinsic rewards, such as cash payments or basic pay, have been required to keep military forces stable, if not viable, throughout history. However, compensation has not historically been the sole reason for service. During war, for example, the relative

[3] Quantity, in this context, relates primarily to the number of personnel needed to accomplish stated missions or required to meet National Military Strategies under a "war of attrition" scenario.

importance of compensation becomes secondary to ideas of freedom, protection, patriotism, and at times, compulsion. For some, mere participation in a profoundly volatile and politically significant event may be reason enough to enlist. For others, monetary reward is the only drawing characteristic of employment. Some may never see redeeming qualities of military service and are subsequently drafted or forced to serve. As with any employment, maintaining a voluntary force of quality and quantity requires a certain level achievement of Maslow's Hierarchy of Needs, regardless of global environment. (8th QRMC, 1997, p.145) Maslow believed people spend their entire lives seeking to satisfy certain needs. This activity, he believed, determined human behavior. Needs fall into five hierarchical categories whereas satisfaction of lower levels must be obtained prior to advancement to higher levels. The levels from lowest to highest are: physiological needs, safety needs, need for belongingness, need for esteem, and need for self-actualization. (8th QRMC, 1997, p. 5) Arguably, the "basic level" is where historical components of military compensation reside—things such as three hot meals a day, a place to sleep, and clothing. Military compensation now incorporates fixtures such as accession incentives, special pay, retention and separation bonuses, special allowances, cash or "in-kind" compensation, travel entitlements, and retirement pay.

Service members do not typically view extrinsic rewards in the military as compensation. (DFAS, 1999, p.1) Such rewards include non-cash medical treatment, morale and welfare services, recreation activities, time off from work, subsidized grocery and retail stores, and military performance awards such as medals. (8th QRMC, p.89, 1997) In fact, DoD publishes an annual report to every active-duty member articulating the "true" value of their compensation. (DFAS, 1999, p.2) Although military personnel do not see these as compensation, they *are* compensation. Most nonpecuniary compensation influences behavior of military personnel and serves as an incentive for members to remain in the military. Further, nonpecuniary compensation supports the military's notorious paternalistic leanings.

Regardless of historical setting, three elements of military service have always existed: behavior of service members, personnel management of service members, and

compensation which provides linkage between the first two. Figure 2.1 provides a graphical illustration depicting these elements and their interrelationship. Arrows represent a direct relationship and more importantly, a directional causal effect from one element to another. Figure 2.1 shows how individual motivation is influenced by an organization's use of theories based upon expectancy. Following the prescribed logic, individual behavior is activated by "expectancies." Expectancy theory views people as having their own needs and ideas of what they desire from work and its rewards. They use these desires to make decisions about what organization to join and how hard to work on the job. Therefore, people are not inherently motivated or unmotivated; motivation depends on the situation people face and how it fits their needs. (8^{th} QRMC, 1997, p.8) Expectancies are controlled by personnel management practices, compensation structures, and intrinsic rewards. This construct clarifies the direction of cause and effect between management decisions and compensation upon individual behavior. By sculpting personnel management strategies, compensation plans, and intrinsic rewards, employers develop expectancies from their employees, which result in certain employee behaviors. In most organizations, behavior of high performance and productivity are desired from employees by management. Figure 2.1 provides policy makers and managers a better understanding of how personnel management and compensation may effect employee behavior.

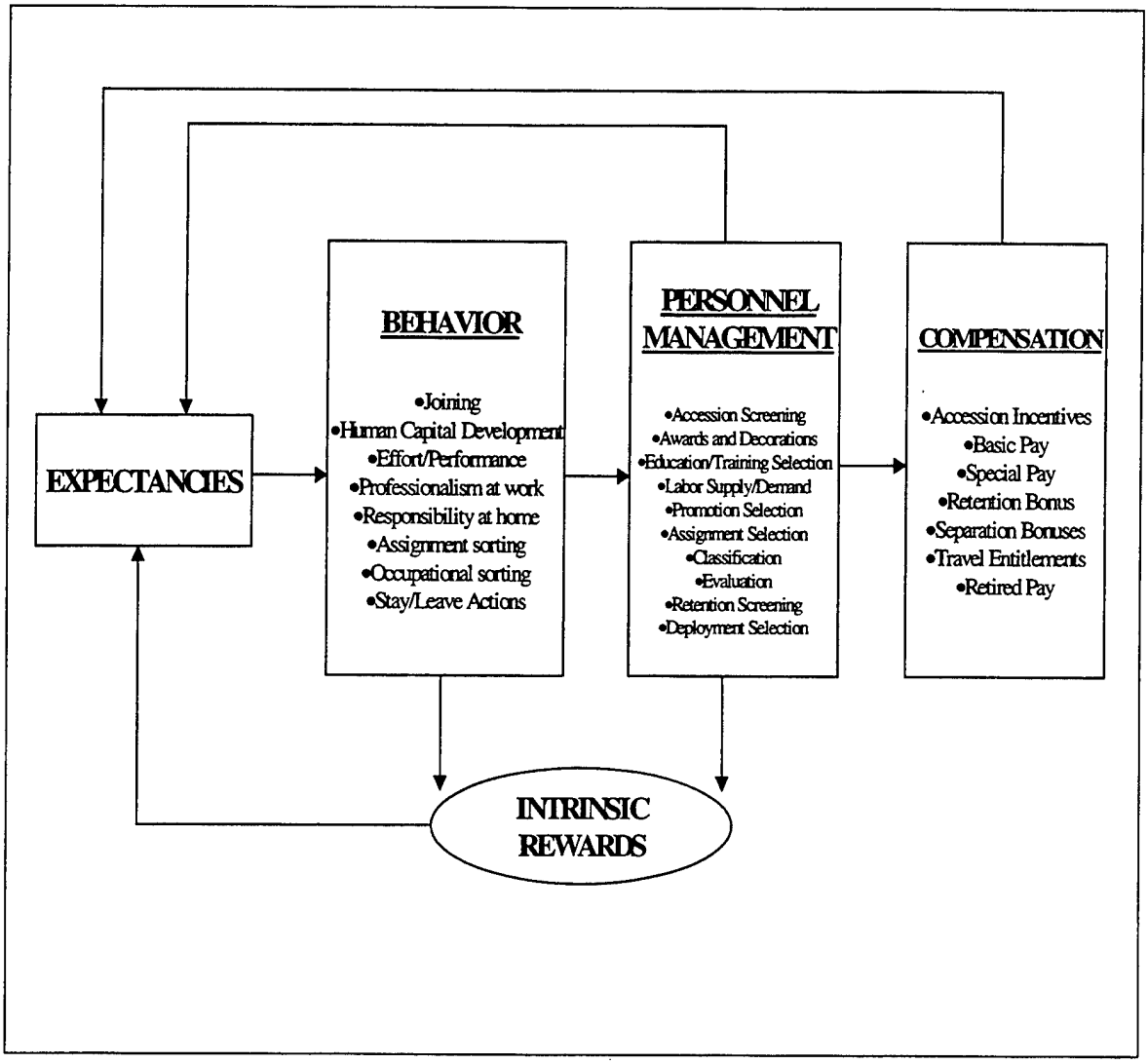

Figure 2.1. Three Historical Elements of Military Service and Their Interrelationship

1. Internal Labor Market

The U.S. military personnel system is characterized as an internal labor market. The military, as an internal labor market, is characterized by two components. First, it does not offer or provide lateral entry. Entry is limited to the lowest echelons of hierarchical labor. As such, all upper-level jobs are filled, except for entry level jobs, by promoting or transferring workers already employed by the firm. This requires personnel to be "grown" through the organization's lessons, experiences, and numerous leadership

and management styles. Although this approach provides service members with a bedrock of social experience beyond technical skill, the tide is turning toward a greater demand for advanced skills in today's highly technical military. A new and greater demand for technical competency within the military is forcing serious reevaluation of the costs related to little external sourcing of personnel. Second, and more important, "the military's internal labor market must identify talented persons, provide adequate training for them, and efficiently assign them to positions. Promotions and wage policy must maintain proper incentives for retention first and then job performance motivation." (Rosen, 1992, p.227)

Due to the constricting characteristics of internal labor markets, military hiring (recruiting) and firing are not as flexible as in the civilian sector. Likewise, military manpower planners are forced to predict future personnel requirements in an ever-changing world demanding differing missions. The challenge placed upon military manpower planners resulting from internal labor market forces is to forecast future force size requirements. Planners find themselves using "just in case" versus "just in time" personnel inventory techniques. Additionally, efforts not to increase personnel expenditures and remain within budget constrains aggravate the situation. The challenges placed upon planners' efforts serve as significant obstacles in targeting and achieving optimal force mixes and size.

2. Promotion Tournaments

Military compensation exists within an economic framework known as "tournament theory."[4] Tournament theory is described as promotions resembling the behavior, prizes, and competition existing in athletic tournaments. First, promotion and compensation awarded to the winner of the tournament are fixed in advance. Second, the winner of the tournament, or the one who is promoted, is recognized not by being "good" in his own right, rather by being better than anyone else. Relative performance, rather

[4] The theory was introduced by Lazear and Rosen (1981).

than absolute performance, is key to promotion tournament theory. Third, "levels of effort with which a worker pursues promotion depend on the size of the potential increase in wage." (Lazear, 1998, p.225)

Components of promotion tournaments, besides general characteristics described above, are two-fold. The winner of a promotion tournament receives the higher position and related salary. The difference between the higher salary and the lower salary, of two possible positions, is a defined quantity. The larger the spread, the higher the effort that workers exert to achieve the job promotion. (Lazear, 1998, p.226) The larger the raise associated with a promotion, the greater the incentive to be promoted. As a result, workers strive to obtain promotions that carry larger raises. In a military example, initial pay raises and promotions are based upon simple longevity, thus incentivising military personnel to "stick around" instead of achieving promotions through performance. Tournament winners are those who endure the longest. This effect is prevalent in ranks between O-1 through O-6 and E-1 through E-7. As one advances beyond O-6 and E-7, performance becomes a stronger variable in determining tournament outcome.

"Limit to spread" is another important concept derived from tournament theory. Taken literally and as quoted by Lazear, "the tournament model implies that contestants will exert more effort in a winner take all tournament than they will in one with a more equal spread of 'prize money.'" (Lazear, 1998, p.226) Since the military operates in an internal labor market and also exhibits promotion tournament characteristics, an important point surfaces:

> ...because in the context of the firm, individuals must be induced to join the organization voluntarily. Not only must the spread be large enough to induce effort, but also the average prize money must be sufficiently high to attract workers to come to the firm in the first place. Otherwise, workers opt for some other activity. (Lazear, 1998, p.227)

3. Administrative Pay Setting

Military supervisors, at all levels, have no direct control over a subordinate individual's compensation other than punitive fines for criminal or deviant behavior.

Certainly, indirect control is achieved over an individual's remuneration through performance evaluations and award recommendations. The linkage between performance and compensation in the military is weak when compared to the civilian sector. The weak linkage relates to long lags between labor performance, evaluation, and resultant pay raises and promotions. This fact demonstrates why military compensation has come to be known as administrative pay.

Payment in the military for work completed rests more upon administrative functions than individual performance or a supervisor's direction or decision. In some respects, government bureaucracy requires such a system; unfortunately, such particulars can have far-reaching negative impacts upon individual performance and organization productivity.

C. DEVELOPMENT OF CURRENT MILITARY COMPENSATION

Motivating individuals to make commitments while fostering loyalty is considered critical to military effectiveness. (Gilroy, 1991, p.6) Political and senior military officials concern themselves with ways to improve commitment and loyalty from service members. One tool used throughout history in influencing these characteristics is compensation. Traditionally, compensation has not been the only device used; love of country, patriotism, and moral indebtedness have also created a professional military identity resulting in cohesion, unity of purpose, and loyalty from its members. (MacDonald, 1998, p.18)

Promoting principles of unity and cohesion distinguishes military organizations from non-military. Recently, non-military organizations are viewing business as synonymous with war.[5] This trend has lead some civilians to learn the skills of military tactics, procedures, and processes. Assuming military pay reflects or enhances those principles held high by military organizations, an easy match between military pay and its

[5] Evidence of this is that Sun Tzu's *The Art of War*, John Maxwell's *Laws of Leadership*, and John Scharfen's *The Dismal Battlefield: Mobilizing for Economic Conflict* appear on business book best seller lists.

principles is established. This means that military pay might provide the basis and foundation that defines its organizational culture. However, when military compensation templates are placed upon civilian organizations, military principles of unity and cohesion do not readily develop. Factors other than compensation are more than likely the cause of cohesion and unity within military organizations. However, civilian firms have discovered principles of unity and cohesion though the use of pay-for-performance plans. (Anonymous, 1998, p.14)

Institutional precepts in the military regard all members of the same rank who have served the same number of years as making the same contribution to national defense. This belief and practice, found in the military, has not been accepted by the civilian sector. However, the civilian sector remains competitive in its "war for customers and talented workers."

1. Basic Pay

The largest component of military compensation is basic pay. Basic pay is the foundation of remuneration in the military to which all members are entitled. Basic pay depends on rank and seniority. Comparable in some ways to civilian salary, basic pay is compensation for work performed and hours on the job, and reflects individual effort. Its purpose is to attract and retain quality personnel possessing skills to support national defense objectives or the National Military Strategy (NMS), as defined by the executive branch of government. (7th QRMC, 1992, p. 16) The 1 January 2000 version of military pay, originally established in 1949, as recommended by the "Hook" Commission,[6] is presented in Appendices A and B.

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[6] In 1948, Secretary of Defense James V. Forrestal championed and chartered the Advisory Commission on Service Pay, also known as the "Hook" Commission after its chairman, Charles J. Hook, to undertake the first comprehensive review of military compensation since 1908. Upon completion of its review, the Commission issued a report titled *Career Compensation for the Uniformed Services, A Report and Recommendation for the Secretary of Defense by the Advisory Commission on Service Pay*, which formed the basis for various recommendations to Congress to restructure military compensation (U.S. DoD, 1991, p.719).

2. Subsistence and Quarters Allowance

In addition to basic pay, service members have also been provided funding, or provisions, for meals and quarters. If satisfactory quarters are not available, or individual members decide not to occupy provided housing, an allowance is paid to defray those expenses of living "on the economy." Because subsistence and quarters allowances (also known as entitlements) are not subject to federal or state income taxes, military personnel realize a tax advantage over civilian counterparts. The magnitude of tax savings depends on allowance amount, total taxable income, and presence of dependents. This particular aspect of military compensation differs greatly from civilian pay.

3. Special Pay

Some military personnel are eligible for special and incentive (S&I) compensation. While every member of the armed forces receives basic pay and either basic allowances for subsistence or quarters, or both, some members receive additional pay above these entitlements. Historically, the first S&I payments were intended to provide rewards for enlistment and retention and in some limited cases for increased hazardous duty. Currently, relatively few S&I pays are meant for hazardous duty, the vast majority provide enticements for certain career paths that would, without incentives, experience manning shortfalls. (U.S. DoD, 1991, p.147)

Some S&I payments are used to attract and retain personnel with special skills or expertise. Special pay is not unique to the military. Civilian companies often provide additional compensation for "hardships" found in overseas assignments or specific jobs involving aspects of danger, called "compensating differences." More to the point, "civilian firms pay additional amounts to attract and retain valuable personnel or those possessing special skills" (MacDonald, 1997, p.13). In 1998, 60 types of S&I payments constituting 10 percent of the total military payroll were provided to 43 percent of the active military force. (U.S. DoD, 1999, p.147) Current military S&I payments are shown in Table 2.1.

Table 2.1. Category, Classification, and Payment Amount for Special and Incentive Payments Current for FY 2000

Category	Classification	Payment Amount
Hazardous Duty	Flight Pay	$110/ month
	Parachute Duty	$110/ month
	Parachute Duty (High Altitude)	$165/ month
	Demolition Duty	$110/ month
	Pressure Chamber Duty	$110/ month
	Flight Deck Duty	$110/ month
	Handling Toxic Pesticide, Virus, or Bacteria Exposure	$110/ month
	Handling Toxic Fuels, Propellants, or Chemicals	$110/ month
	Duty Subject to hostile Fire/Imminent Danger	$150/ month
Career Incentives	Flight Pay (Crew Member)	$150-$400/month
	Aviation Career Incentive Pay	$125-$650/month
	Flight Pay (Air Weapons Controller)	$125-$350/month
	Diving Duty	$340/month
	Career Sea Pay	$50-$520/month
	Sea Pay Premium	$100/month
	Special Duty Assignment	$275/month
	Enlisted Member Extending Overseas	$80/month
	Enlisted Member assigned to High Priority Unit	$10/month
	Submarine Duty	$75-$595/month
	Foreign Language Proficiency	$300/month
	Medical Officers Board Certification Pay	$208-$500/month
	Medical Officers Variable Special Pay	$83-$500/month
	Dental Officers Board Certification Pay	$166-$333/month
	Dental Officers Variable Special Pay	$83-$500/month
	Optometrist Regular Special Pay	$83-$500/month
	Psychologists	$100/month
	Non-physician Health Care Providers	$2K-$5K/year
	Veterinarians	$2K-$5K/year
	Reserve Medical Officers Special Pay	$100/month
	Special Duty in Certain Places	$450/month
	Officer Holding Billet of Unusual Responsibility	$8-$25/month
	Assignment to International Military Headquarters	COLA Scale
	Special Warfare Officer Continuation Pay	$15K/year

	Surface Warfare Officer Continuation Pay	$50,000
Skill Incentives	Selective Reenlistment Bonus	Up to $60,000
	Reenlistment Bonus-Ready Reserve	$1500
	Reenlistment Bonus-Selected Reserve	$2500
	Nuclear Qualified Enlisted Members	$15,000/year
	Nurse Anesthetics	$6,000/year
	Optometrists Retention Special Pay	$6,000/year
	Aviation Career Officers Extending Active Duty	$25,000/year
	Engineer and Science Career Continuation	$3,000
	Acquisition Corps Continuation Bonus	15% Basic
	Medical Officers Multiyear Retention Bonus	Pay/year
	Medical Officers Incentive Special Pay	$14,000/year
	Nuclear Qualified Officers Extending Active Duty	$36,000/year
	Nuclear Career Annual Incentive Bonus	$22,000/year
	Dental Officers Additional Special Pay	$10,000/year
	Medical Officers Additional Special Pay	$6K-$10K/year
	Enlistment Bonus	$15,000/year
	Army Enlistment Bonus	$20,000/year
	Bonus for Reserve Affiliation	$4,000/year
	Enlistment Bonus (Ready Reserve)	$50,000/year
	Enlistment Bonus (Selective Reserve)	$1,000/year
	Prior Service Enlistment Bonus	$2,000/year
	Accession Bonus for Registered Nurses	$1,250-$2,500
	Nuclear Career Accession Bonus	$5,000/year
	Judge Advocate Continuation Pay	$8,000
	Veterinary Officers Board Certification	$60,000
		$5,000/year

Source: Defense Finance and Accounting Office, Kansas City, Missouri.

4. Other Allowances and Compensation

Some service members are eligible for compensation offsetting job-related expenses falling outside normal parameters of duty. These include allowances for special uniforms or civilian attire, family separation payments, and education allowances. Also, in certain areas where cost of living is deemed excessive, supplementary payments defraying portions of the added expense are provided. (MacDonald, 1997, p.15) These

allowances, more times than not, take the form of "Cost-of-Living-Allowances," or COLA, and are used primarily during overseas assignments.

D. BASIC AND REGULAR MILITARY COMPENSATION

The combination of basic pay, bonuses, and skill incentives constitutes what is called Basic Military Compensation (BMC). Basic pay by itself is not representative, for comparative purposes, to salaries in the civilian sector. However, comparisons can be made between Regular Military Compensation (RMC) and private sector salaries. RMC is equivalent to BMC plus Basic Housing Allowance (BHA) and any related tax advantages provided a service member. Conventional wisdom deems RMC a suitable calculation for comparisons between civilian and military compensation. (8th QRMC, 1997, p.145) Therefore, these two figures, RMC and average civilian pay, serve as the basis for deriving ECI. ECI, as explained earlier, is a figure used to justify most of the across-the-board military pay raises since 1965. Although ECI has not been used as an official measure since 1974, RMC is regarded as the military equivalent of average civilian salaries. (MacDonald, 1997, p.15)

Basic pay is the only element of military compensation used to calculate retirement annuities. Basic pay currently represents approximately 72 percent of RMC for active-duty personnel. Basic pay becomes monumentally important as members reach retirement age. So, a 20-year active-duty retiree may be eligible for 50 percent of basic pay, but only 36 percent of RMC. 30-year retirees are entitled to 75 percent of basic pay, but only 56 percent of RMC. The relationships between basic pay, RMC, and retirement annuities are important when comparing military retirements to public and private pension plans. (Asch, et al, 1994, p.101)

E. SETTING MILITARY COMPENSATION

Prior to late 1960s, adjustments to military pay were not regular occurrences. Separate legislation was required for each change in basic pay allowance. Increases in pay were the result of intense political bickering usually in concert with increased

international tension. Ten increases in basic military pay were approved between the end of WWII and 1968 (approximately 23 years). Of the ten pay raises, four were across-the-board increases while others targeted specific year groups neglecting those who had served less than two years. In 1967, the U.S. Congress introduced the idea of "comparability" into the military pay system. It was designed to provide a means of establishing a comparable rate between military personnel and their private sector counterparts.[7] (DoD, OOA, 1996. p.19) Due to numerous differences between both pay systems, a formula was used to convert civilian pay increases into equal increases for the military. Later, the formula was revised to account for increased allowances, such as quarters and subsistence. (DoD, OOA, 1996, p.21)

The military pay system differs in many respects from civilian systems, the two most prominent differences being:

1. The military compensates members principally upon rank and longevity; civilians emphasize skill level and occupation, linking pay directly to worker performance and productivity.

2. The military provides basic necessities for food, clothing, shelter, and medical care to all members whereas the civilian sector does not.

Cash allowances are new to military pay systems. Prior to WWII, additional pay such as housing entitlements, special pay, and bonus or incentives were extremely rare if nonexistent. Basic pay was the majority of earnings, while subsistence, clothing, and quartering were all provided. The paternalistic nature of military service was seen as efficient due to the predominantly single male population. There was no concern for civilian and military pay equivalence due to the non-transferable nature of military service—simply stated, military jobs had no civilian counterpart.

Additionally, conscription played a significant role in setting military compensation. Due to forced service for young able-bodied men, there was no need to

[7] Important to note that this measure was introduced prior to the genesis of AVF.

compete with outside employment agencies or within normal labor markets. The force's composition was also different than today's. Seamen and infantrymen made up the vast majority of service members. The hierarchical structure of the military placed great emphasis on rank and tenure of members instead of skill, productivity, and job performance. Reasons for this can be found in the belief that the military was an institution and not an occupation. (Moskos, 1977, p.4)

Institutional approaches to employment within the military were reasonable to most participants since authority and relationships between subordinate and superior required discipline and control. Functions of the military personnel system require all individuals to respond to orders without hesitation or reflection; it demands discipline unlike that in the civilian sector. The assumption that this influence is a carry-over from wartime scenarios is reasonable. Fundamental organizational fixtures, such as strict authority, imply that the military establishment places individuals at the disposal of the organization. Those of higher rank determine what jobs are completed, methods of completion, and timing of completion without assistance from subordinates. (MacDonald, 1997, p.18)

F. TRADITIONAL PROBLEMS WITH MILITARY COMPENSATION

Although military pay tables seem effective in accomplishing service goals, their efficiency is often questioned. During the 108th Congress, a banner year for military compensation, pay-table reform was initiated. An across-the-board pay raise was approved. Additionally, structural changes to the pay table were also incorporated. Modifications to specific year groups de-emphasizing longevity while rewarding long-term performance were instituted. Pay was skewed more toward promotions rather than longevity. Today, greater pay raises are seen for long-term performance rather than time in service; however, small increases in pay are still realized for longevity. Although emphasis on performance-related compensation has increased, problems still exist with military remuneration methods as highlighted below.

1. Structure

The basic structure of the military pay table has not changed since its establishment in 1949. A number of incremental[8] changes to the table have increased its effectiveness. Changes resulting from legislation directing various pay adjustments, pay raises, caps, and the creation of new pay grades have occurred. These changes have for the most part increased rewards for members who display long-term good behavior within the military. One development discovered during 1998 was the distinction between different ranks at similar years of service. Prior to structural changes, differences between ranks at similar years of service were too small to resemble true rewards or incentives related to promotion. The change was sorely needed because historical scaling provided a weak relationship between pay-grade differentials. Pay raises were based more upon longevity than on performance or promotion. Structural changes, combined with pay raises, ranging from 2.8 to 38.2 percent for promotion and raises from 1.3 to 21.8 percent for longevity, proved beneficial. Until recently, years of service weighed as heavily as promotion in some cases, weakening incentives for individual performance. (8th QRMC, 1997, p.97)

Like most compensation systems, the fundamental objectives of military basic pay are to attract, retain, and ensure maximum performance from personnel. (DoD, 1991, p.5) The military should also provide recognition for military status relating to rank and longevity. (Asch and Warner, 1991, p.34) Rank is the historical measure of both past performance and current responsibilities in the military and should, therefore define differences in individual compensation. Early research on AVF has demonstrated that significant deviations from stated compensation objectives undermine morale and personnel readiness and are reasons for recent changes to the compensation system. (Ruehlin, 2000, p.34) From a DoD and taxpayer perspective, basic pay should support quality forces of sufficient size, performing at as high a level as possible. (7th QRMC,

[8] Incrementalism as defined by E.S. Quade (Quade, 1994, p.116), as small, relatively evolutionary developments.

1992, pp.41-43) The challenge of setting military pay is to meet objectives of retention and recruiting while also ensuring maximum performance from all members. Although research has not proven its success, recent structural changes to military pay tables (as reflected in Appendices A and B) serve that end. (DFAS, 1999, p.2)

Other requirements of military basic pay are to establish appropriate pay differentials between rank and time-in-service. Since the military operates in an internal labor market, it should recognize key career retention crossroads. Military compensation should be sensitive to contracted service lengths and provide incentives for retention and continued service at appropriate times. (MacDonald, 1998, p.19)

Asch and Warner provide a three-tiered requirement for organizations, such as the military, on actions to take in structuring pay schemes:

> Closed (internal labor market) hierarchical organizations must design compensation policies that encourage individuals to: (1) work hard and effectively; (2) self-sort into ranks to which they are suited; and (3) leave when it is in the best interest of the organization. Specifically, a skewed pay structure is required to motivate effort and influence self-sorting. (Asch and Warner, 1994, p.189)

Their study examined the U.S. military compensation system determining whether it meets these criteria. For the most part, Asch and Warner's requirements are being met by the military pay structure. However, some instances exist where the first requirement of employee hard work and effectiveness are diminished. Figure 2.2 illustrates the point.

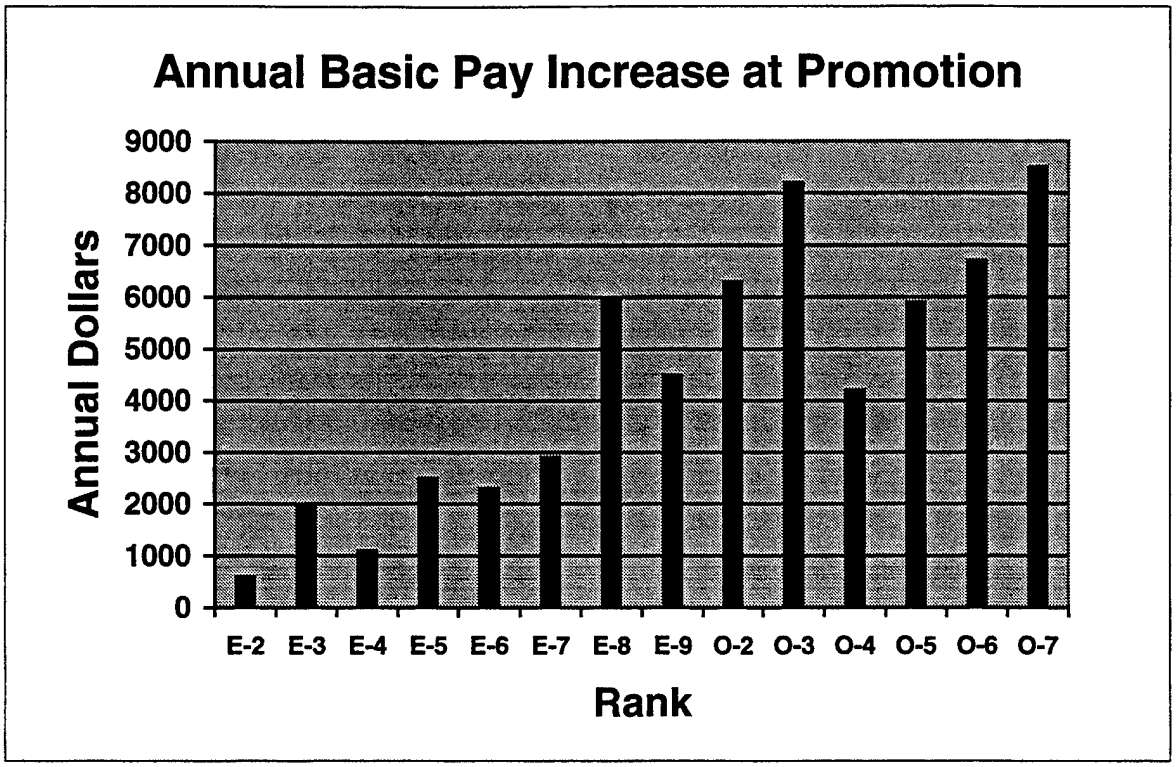

Figure 2.2 provides average annual increases in basic pay for promotions based upon FY 2000 pay tables. Close examination of Figure 2.2 shows that average annual pay increases, due to promotion, are small through the first six enlisted grades and large for the last three enlisted grades. Of particular interest is the average increase from E-7 to E-8 being greater than the increase from E-8 to E-9 (MacDonald, 1998, p.20). For officers, the average promotion increase to O-4 is considerably less than the increase from O-2 to O-3. On average, the most significant leap of pay is from O-6 to O-7. The incentives beyond the O-7 promotion point are small if non-existent in terms of compensation. (MacDonald, 1998, p.20) One inconsistent aspect of the military pay table is the diminishing promotion pay increases for grades E-3 to E-4, O-3 to O-4, and E-8 to E-9. The diminishing aspect of increased pay found at these grade levels contradict the recommendations presented by Asch and Warner. Incentives for employees to apply hard work and effectiveness toward duties at ranks E-3, O-3, and E-8 may be detrimentally effected by lower relative pay raises. Figure 2.3 provides similar data as Figure 2.2;

however, it presents pay raises related to promotion as a percentage of average basic pay. Similar conclusions can be drawn as articulated above. However, the inclusion of rank E-5 to E-6 now falls into the same category when annual pay raise percentage is introduced.

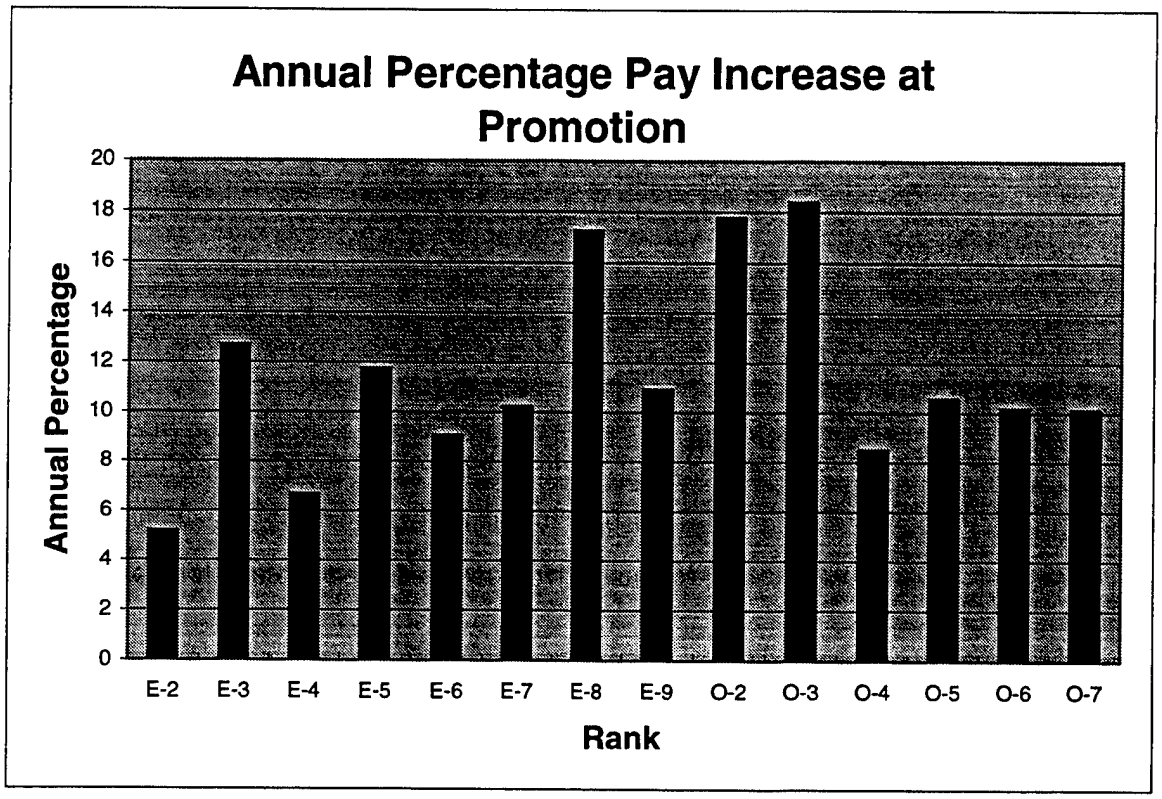

Figure 2.3. Annual Pay Increase as a Percentage of Basic Pay at Promotion.

2. Pay Tables

One issue often presented by DoD compensation experts[9] is whether military pay tables should emphasize time in service or time in grade. These experts agree that better performance is reflected in faster promotions and that performance should be rewarded in the military pay system. (8th QRMC, 1997, p.45) This argument favors this thesis's

[9] Experts, identified here, requested to remain anonymous during interviews.

premise that pay for performance works and should be incorporated into military pay systems. Regardless of recent changes in the pay table, time-in-service requirements for increased pay provides those individuals who follow the fast track (or at least receive promotions in a timely manner) no significant compensation advantage over an average member. Even after the average member (or marginal member) is promoted to the same rank as the "fast tracker," final pay is generally equal. (MacDonald, 1998, p.21) An example of this can be presented with reference to Appendix A. An O-4 at 12 years earns $4268.00 per month regardless of date of promotion. An individual who was promoted 1 year prior compared to an O-4 promoted 4 years prior makes the exact same salary as long as total time in service is equal. A wage based upon time in grade would differentiate between the same two officers, one having 1 year time in grade as compared to the other with 4.

However, like time in service, time-in-grade emphasis has its own flaws. First, time in grade overlooks reasons that some individuals may be promoted faster than others. For example, within services and ratings, faster promotion generally recognizes superior performance. However, there are at least two occasions where this effect does not hold. Significant differences exist within and among services in the amount of time it takes to reach particular ranks. Further, promotion opportunity is different for each branch; that is, the percent that are actually promoted each year differs. It takes longer for an individual to make O-3 in the Marine Corps than in the Navy, to cite one instance. And, on average, 45 percent of O-5s in the Marine Corps are promoted to O-6, while in the Navy it is 60 percent. Table 2.2 and 2.3 provide complete reviews of average promotion time and percent "in-zone" acceptance rates for each branch as well as Defense Officer Personnel Management Act (DOPMA)[10] guidelines for promotion timing. Thus, time in grade would magnify the interservice pay differential by giving a permanent pay "advantage" to individuals promoted faster, even though promotions were not a result of individual merit. (7th QRMC, 1992, p.43)

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[10] DOPMA mandates numerous controls upon officer promotion rates and quantities within each rank DoD-wide.

Table 2.2. Average Time in Service Prior to Promotion (in years) by Rank and Branch Fiscal Year 2000

Rank	DOPMA	USMC	USAF	USN	USA	CG
O-1	0.0	0.0	0.0	0.0	0.0	0.0
O-2	2.0	2.0	2.0	2.0	2.0	2.0
O-3	4.0	4.2	4.0	4.0	4.0	4.0
O-4	11.0	10.1	11.7	10.9	10.1	11.0
O-5	17.0	16.9	16.8	16.6	15.2	18.0
O-6	23.0	22.8	22.1	22.4	21.4	23.0
O-7	25.0	27.3	26.5	26.4	26.9	24.8

Source: Captain John Bede, USA. (OSD Officer Policy Branch) 2000.

Table 2.3. Average Promotion Percentage of Officers "in Zone" by Rank and Branch During Fiscal Year 2000

Rank	DOPMA	USMC	USAF	USN	USA	CG
O-1	95	100	100	100	100	100
O-2	95	100	100	100	100	100
O-3	95	95	100	99	98	97
O-4	80	85	90	80	77	82
O-5	70	70	70	75	68	63
O-6	50	45	50	60	42	51
O-7	N/A	5	3	7	7	2

Source: Captain John Bede, USA. (OSD Officer Policy Branch) 2000.

Second, promotion rates among different skill levels or "occupational specialties" within the same service are different. An example of this can be found in the Marine Corps where it takes longer to reach grade E-5 in infantry-related skills than it does as a Small Computer Repair Specialist. Such situations occur due to the military's enlisted

promotion system being based upon vacancies in specific occupational fields. If attrition is high in one particular field, relative to another, promotions in the high attrition category will be faster and more liberal in performance requirements than the other. (7th QRMC, 1992, p.43)

Due to the military's internal labor market, all personnel start at the bottom and rise in rank one step at a time.[11] Public policies, laws, force structure, and vacancies, all beyond an individual's control, determine promotion ascent rates. DoD compensation experts state that time in grade motivates performance,[12] but may also be perceived as inequitable within the military for myriad reasons. Perceived inequities resulting from dissimilar promotion rates for similar service members undermine motivation. (MacDonald, 1998, p.22) Common misperceptions or actual occurrence of wage inequalities within military ranks, or military members in general, eat away at military cohesion, a critical component to military efficiency. (MacDonald, 1998, p.24)

The 8th QRMC confirmed the findings of the 7th QRMC, resolving that time in service is superior to time in grade because it offers greater rewards for "performance."[13] Also, according to the 8th QRMC, current military pay tables provide instances where pay raises can be shifted to account for increases in rank, relative to time in service. Their review also concluded that time in service tends to promote longer careers since some emphasis is placed upon longevity regardless of general promotion rates DoD wide. (8th QRMC, 1997, p.123)

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[11] Although some entry-level contracts include accelerated promotions post boot camp completion. This is, more times than not, related to recruiting incentives and special skills of a prospective recruit and not performance of duty.

[12] This statement is made when time in grade is compared to time in service. As one is promoted before peers, a time in grade based wage system provides greater rewards over time.

[13] "Performance," in this case, refers to staying for a 20-year career.

3. Pay Gap

Of all identified problems with basic pay, most prominent is the disparate nature of military pay growth relative to growth of civilian wages. Reportedly, not since 1982 have military and private sector pay been considered equal (Asch and Warner, 1994, p.67) Since then, Congress has capped military pay raises at one-half percent below the average American's pay increases in 11 of the past 16 years. The cumulative effect of these policy decisions is a gap now exceeding 13 percent and continuing to widen. Representative Steve Buyer, Chairman of the House National Security Personnel Committee, and Senator Dirk Kempthorne, Chairman, Personnel Subcommittee of the Senate Armed Services Committee, both think the gap will increase to over 15 percent by 2001 if nothing is done. A bill passed by both houses of Congress on 22 September 1999, authorized a 4.8 percent across the board pay raise effective 1 January 2000. GAO forecasters currently expect an 11.5 percent pay gap by FY 2001 resulting from the bill passage. (DFAS, 1999, p.7) The legislation mandated future military raises to be 1 percentage point above the annual growth of ECI. For example, if annual ECI grew by 2.5 percent, then the annual military cost of living pay raise would be 3.5 percent.

About 75 percent of service members will receive another pay raise, effective 1 July 2000, in addition to the 4.8 percent increase provided in January (refer Appendix B). The impetus to this unprecedented second annual pay raise is directly attributable to efforts to close the pay gap by Congress. These legislative actions also put to rest efforts to eliminate matching of military pay raises to civilian wage growth.[14] However, some defense and service officials still support changing the current link between civilian sector and military wage growth, and believe recruitment and retention would improve from such a measure. (AFA (B), 1997, p.1)

[14] Contained in Title 37, U.S. Code.

G. MILITARY RETIREMENT COMPENSATION SYSTEM

The military retirement system is an important benefit to career service members. The retirement program applies to all members of the armed services and is valued under the same guidelines explained for basic pay. The current system is a noncontributory benefit dating back to 1947. Congress implemented a common system for both officer corps and enlisted ranks in 1947 legislation. In 1948, with the Air Force Vitalization Act, all services were required to participate under the same rigid standardized retirement plan. The hallmark of the legislation was a 20-year minimum vesting requirement for retirement. Modifications instituted by the Defense Officer Personnel Management Act (1981) and the Military Retirement Reform Act (1986) were aimed at reducing costs of funding military retirement. (DoD OOA, 1996, p.142) Regardless, military retirement still provides an immediate lifetime annuity to those who separate with 20 or more years of service; no respective benefits are provided for those who leave with fewer than 20 years. (MacDonald, 1998, p.31)

The current military retirement system consists of three noncontributory retirement programs determined by each member's service entry date.[15] Members are eligible to retire after 20 years of service in each program, with the exception of flag-grade officers who may retire after 30 years of service.

Some politicians assert that military retirement is too generous compared to civilian retirement plans. They claim that any plan paying substantial annuities, including annual COLA, to individuals who retire at a "relatively" early age are too expensive and too bountiful, and should conform more to civilian retirement benefit schemes. Those opposed have fought successfully to preserve the current system stressing that conditions of military service are fundamentally different from those of the civilian sector. They argue that because military forces require a large population consisting of youth, retirement programs should be unique and more generous. (MacDonald, 1998, p.32)

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[15] They are: "final basic pay," "high three," and "REDUX." All three plans are discussed later in this chapter.

1. Purpose and Objectives

Most experts agree that the purpose of military retirement pay is to attract and retain quality personnel. They want a system that competes with the private sector for quality personnel, at reasonable cost to taxpayers. Further, they argue that military retirement should be flexible enough to serve as a suitable tool for managing force levels. As confirmed by MacDonald, the DoD Office of the Actuary states that five principle motivations guide the military retirement system; three of those principles are presented here. First, it must ensure that service in the military is competitive with other reasonable employment alternatives. Second, because the military careerist make numerous sacrifices, some measure of economic security must be made available to those who serve 20 years or more. And last, it must fulfill the Defense Department's role of defending the United States by ensuring experienced personnel are available for recall during times of national emergency. Most important, during times of decreasing budgets and deficit reduction, leaders must ensure that costs are reasonable and acceptable to political leaders and taxpayers. (MacDonald, 1998, p.35)

All things considered, the Office of the Actuary's definition of retirement compensation was similar to the 8th QRMC's. As quoted by the 8th QRMC, "the combination of 20-years 'vesting' and payments of an immediate annuity after service, imply a system designed to promote a young force and ensure experienced personnel remain in service until encouraged or forced to retire." (8th QRMC, 1997, p.96) The current military retirement system generally serves as a strong retention tool after a certain career point (normally 9 to 11 years); this situation convinces most personnel to remain until at least 20 years of service. 1996 military retention data show that 10 to 15 percent of enlisted personnel and 30 to 40 percent of officers become eligible for retirement every year. Of the percentage of personnel who reach 10 years of service, about 70 percent of enlisted and 90 percent of officers go on to serve a total of at least 20 years. (Asch and others, 1998, p.69)

2. Components of the Retirement System

Most attention on retirement pay centers on non-disability retirees. Non-disability retirees make up the vast majority of retirement costs and are the largest subgroup of retirees. However, recent efforts to change the military retirement system have not been limited to non-disability retirees. Dissatisfaction with survivor benefits, evidenced by decreasing participation rates, has led to revisions of existing laws. In 1998, lawmakers expressed concern that subsidies for the Survivor Benefit Plan (SBP) fell to 26 percent, well below the congressional objective of 40 percent. As reported by MacDonald, the Committee on National Security stated that, "the committee is focused on exploring options that will increase subsidies and make programs more attractive to military retirees." (H.Rept No.105, 1998, p.34) Also, reform proposals have targeted reserve retirement spending and separation pay for individuals who leave involuntarily. (MacDonald, 1998, p.33) Non-disability retirement is often criticized for the same reasons as disability retirement; beneficiaries receive payments much earlier in age than their civilian counterparts. Regardless, intent of most legislative action centers on non-disability retirees. As such, this thesis concentrates solely on non-disability retirement pay when referring to military retirement. During FY 1999, 3.67 million non-disability retirees from active duty received $34.7 billion in compensation, constituting more than 82 percent of total retirement outlays. (DoD, OOA, 1996, p.169) A summary of military retirement system outlays for FY 1999 is provided in Table 2.4.

Table 2.4. Summary of Fiscal Year 1999 Retirement Outlays in Dollars and Number of Participating Retirees

Retirement System Components	Number of Retirees	Dollar Amount
Non-Disability Retirement	1.29 million	$23.86 billion
Disability Retirement	119,000	$1.49 billion
Reserve Retirement	216,000	$2.11 billion
Survivor Benefits	223,000	$1.51 billion
Temporary Early Retirement Authority	42,000	$40 million
Total	1.89 million	$29.01 billion

Source: Adapted from MacDonald, 1998, p.34

3. Current Benefit Structure

The military's retirement system has undergone numerous changes since its inception. Recent changes have resulted from financial pressures related to deficit reduction. Attempts to maintain a balance between military retirement benefits and those delivered in the civilian sector also complicate things. Military manpower specialists argue that changes to the retirement system have been used as inputs to achieve manpower levels consistent with national security and NMS. However, most changes to the retirement system center upon federal budgetary constraints. (DoD, 1991, p.635) In any case, three current systems used today are presented:

a. Final Basic Pay

Members entering service prior to 8 September 1980 are eligible to retire after 20 years of service with 50 percent of final basic pay graduated up to a maximum of

75 percent with 30 years of service. Post-retirement pay is adjusted to reflect cost-of-living increases based upon annual CPI growth. This retirement system is commonly referred as "Final Basic Pay." (DoD, OOA, 1996, p.153)

b. High Three

The Defense Officer Personnel Act of 1981 places members who entered service between 8 September 1980 and 31 July 1986 in a system known as "High Three." These personnel are eligible to retire after 20 years of service, but annuities will be 50 percent of the average of their three highest years' basic pay. In most cases, averaging lowers retirement pay by approximately 6 percent annually from the "Final Basic Pay" plan. (DoD, OOA, 1996, p.154) "High Three" incentivizes service members to serve beyond the mandated requirement of two years active duty past all promotions.

c. REDUX

The Department of Defense Authorization Act of 1984 requires the military to pay normal costs of retirement from their coffers. Therefore, on 30 June 1986, President Reagan approved the Military Retirement Reform Act of 1986. His approval was based upon urgings from the military and Congress to reduce costs. The dramatic change to the retirement system, approved by Congress for FY 1986, reduced non-disability retirement accrual costs of the military retirement system by $2.9 billion annually. (MacDonald, 1998, p.36) Congress changed the program in 1986 to reduce the system's burden and increase incentives for personnel to complete a 30-year career in the active forces (MacDonald, 1998, p.36).

For members entering after 31 July 1986, the amount of their retirement pay was based on the average of the highest three years of basic pay, "High Three." However, the fundamental differences between "High Three" and "Final Basic Pay" is a simple percentage. The new multiplier under REDUX for 20 years of service was *40 percent* of basic pay graduated to *75 percent* at 30 years of service. Additionally, inflationary offsets were capped at one percent below CPI, annually. The new policy

eroded the costs to government as well as purchasing power of retirees until age 62, when a one-time restoration of the "value" of the pension is reinstated. (DoD, OOA, 1996, p.154)

Recently, the 108th Congress re-evaluated REDUX and made participation optional for active-duty members. Due to budgetary flexibility and the realization that REDUX was seen as unfair by current members, it was repealed. Now, personnel have two options to choose from when determining their retirement plan. The first allows individuals to participate in REDUX and receive an additional $30,000 "kicker" at the 15-year mark while continuing to serve to 20 years. The other option for members, if REDUX is not chosen, is "Final Basic Pay." REDUX repeal was presented in the 1999 Department of Defense Authorization Bill and went into effect 1 January 2000. Another factor influencing the repeal of REDUX was the emergence of increased recruiting challenges. Simply stated, REDUX was thought to be detrimentally influencing recruiting efforts.

4. Perceived Problems with the Current Military Retirement System

Despite standing the test of time, 20-year retirement vesting has remained controversial from the beginning. In 1947, the Joint Army-Navy Pay Board and the "Hook" Commission presented their concerns. More recently, critics have argued that the retirement system is too costly and administratively burdensome. They state that the system is unfair to those who serve less than 20 years and injects inefficiency into force management efforts. Additionally, they think the current system does not provide a suitable tool for influencing performance for *all* service members. (Asch and Warner, 1994, p.2)

Data show that services are reluctant to involuntarily separate personnel with less than 20 but more than 10 years of service without additional compensation. The reasons for this are varied, but are primarily due to financial consequences of those separating members and negative impacts upon all members' morale. (8th QRMC, 1997, p.47) The 20-year system creates an implicit contract with mid-level "careerists" at 10 years,

inducing services to retain more middle managers than they might otherwise. This problem was highlighted by the need to induce separations, but also to compensate separated members with less than 20-years service during the reduction in forces experienced during 1993-1997. (Asch and Warner, 1994, p.3)

a. Excessive Cost

Critics maintain that today's military requires more service members for less than 20 years, and certainly less than 30 years; however, some valuable members are required for longer periods. Active-duty service members in a 1996 Government Accounting Office (GAO) survey supported lengthening careers for senior officers and shortening them for other officers. The arguments for lengthening careers of senior personnel are that a longer career is needed to get a payoff from increased investment by the military in formal education, experience, and joint-duty assignments. The need to shorten careers for other officers is based upon a diminished need for certain occupational specialties, unsatisfactory individual performance, or overpopulated career fields. However, shortening careers of other members presents obstacles. The military has historically been reluctant to separate service members with more than 10 years of service but less than 20 due to retirement vesting requirements. As such, a policy solution for shortened military careers could be graduated vesting retirement plans of 5, 10, and 15 years of service, thus relaxing the traditional vesting requirement of 20 years. Some defense analysts, including Mr. Jacques Gansler,[16] believe military retirement, though "politically loaded," is likely to change due to cost considerations. (Risher, 1997, p.234) More and more service members are retiring at approximately 40 years of age, depriving the services of their experience while collecting pay for the rest of their lives. (Asch and Warner, 1998, p.2) Because military retirees are departing before their use is expended, services now desire them for longer periods. (MacDonald, 1998, p.47) By some accounts, the future nature of war combined with new emphasis on network-centric

[16] Quoted while he was serving as the Under Secretary of Defense for Acquisition and Technology.

warfare and technology, may allow an older workforce in the active-duty ranks. For this reason, it is believed that youth will no longer be as fundamental to the process of war as years before.

b. No Provisions for Vesting

Recently, Congress has been sensitive to the "inequity" of 20-year retirees receiving annuities for the rest of their lives, while others who serve for shorter periods receive nothing. Although the government has promised changes to the current structure of retirement benefit packages, it is not on the front burner. Not until 2005 will the government seriously consider, and possibly implement, a military Thrift Saving Plan (TSP) similar to many civilian sector programs. TSP will address issues raised by critics, but it also presents other questions, namely whether it will be contributory or fully funded by the government.

Vesting options might be considered when attempting to reduce the cost of the retirement system and gearing it more toward performance. An effective system should recognize two distinct purposes of the military retirement system: One, provisions for those personnel who have already vested; and two, options for those who decide to leave prior to vesting. It is reasonable to state that retirement policy issues should also address: (1) how long individuals should serve before becoming eligible for retirement; and (2) reasonable measures of individual experience, occupation specialty, and performance, and the positive or negative impact their early departure would have upon the service. (Asch and Warner, 1996, p.196) Currently, the answer to both questions, for all personnel, is 20 years of service. (MacDonald, 1998, p.48)

c. Inflexibility

The civilian sector requires different experience levels within skill groups; the military system produces similar experience levels across a broad spectrum of skills. The military's internal labor market and redundant mission requirements develop employees with similar experiences. A classic example of this inefficiency is seen with

military pilots. Most operational military pilots are found in three ranks, O-3, O-4, and O-5. However, these pilots all perform the same "job," flying airplanes. Certainly, some individuals may possess higher responsibilities, such as commanding officer or safety officer, but their primary duty remains flying airplanes. It is strange that there would be significantly different pay scales for individuals performing the same job without the presence of significant differences in productivity or performance. Some skills, however, do require youth and vigor while others require experience and technical expertise. Further, investments are made in individual training only to result in those same skills not being fully utilized by a member because of expected promotions, changing job assignments, or retirement.

The Army experiences similar ebbs and flow between youth/vigor versus experience/technical expertise in its infantry units. Infantry units require a large population of youthful personnel, but relatively few at senior levels. As individuals remain on active duty their infantry skills begin to diminish as they are relegated to desk jobs on higher level staffs or other bureaucratic jobs throughout the force. This illustrates how mid-level personnel, who are not vested, are sometimes assigned to other "infrastructure" jobs for the remainder of their career while awaiting the 20-year mark. Regardless, DoD's "one-shoe-fits-all" perspective of military grade, experience, and contribution might not efficiently or optimally match the right people to jobs. As quoted by MacDonald, Ash and Warner state, "the recent drawdown provides evidence that the current structure of the retirement system hampers the DoD's ability to respond (actively) to force management issues in a timely manner" (Asch and Warner, 1998, p.176).

d. Effects Upon Retention and Attrition

Despite critics' charges that the military retirement system is overly generous, declining trends in recruiting and retention have forced policy makers to consider how vibrant REDUX is in affecting individual decisions to leave the service. A 1994 RAND study convincingly presented the idea that retirement cuts, included in REDUX, would affect retention. The study indicated that officers would be 10 percent

less likely to stay 20 years and enlisted personnel would be 20 percent less likely. (Asch and Warner, 1994, pp.47-72) In 1999, the 108th Congress took the RAND study to heart and made REDUX optional for service members. The influence this will have upon retention, for both officer and enlisted personnel, is yet to be seen.

H. CURRENT MILITARY PAY COMPENSATION INCENTIVES

Every member of the armed forces is entitled to basic pay and either basic allowance for quarters or subsistence, or both, by merely joining. Some members receive additional payments to basic pay and subsistence and quarters allowances—known as S&I pay. Historically, S&I pays were intended to provide enlistment and re-enlistment incentives (1790 and 1791 respectively). Today we find S&I pay focused upon providing incentives to certain career fields or occupational skills that would, without incentives, be short manned. (DOD, 1991, p.147) Aviation career incentive pay, aviation officer continuation pay, and nuclear submarine duty pay are but a few examples of these incentives. S&I payments serve as a supply and demand balancing mechanism for service requirements of the modern military. As a whole, S&I pay serves to bring volunteers to certain military career fields and to those that involve degrees of hazard. (DoD, 1991, p.147.)

One aspect of S&I pay has remained constant, that being its continual real increase since the inception of the AVF. Fifty years ago, the military used seven types of S&I payments; today, Table 2.1 shows a listing of 60 S&I payments used in the military. This comparative statistic illustrates the increased use of these payments to shape and influence behavior in the military.

1. Retention Efforts

One important requirement of military compensation is that of retaining personnel. Retention is exceedingly important to the military institution. Therefore, the majority of effort analyzing and providing recommendations to increase the effectiveness and efficiency of military compensation has centered upon individual retention rates. The

issue with most military compensation studies is not the identification of variables and their relationship to retention, but their strength of correlation. This importance is compounded by the effect of internal labor markets, the AVF, and policies such as "up or out."[17] Throughout history, the military has also rested its compensation structure and culture upon paternalistic policies in hopes of retaining more personnel and increasing combat effectiveness. Examples of this paternalistic focus are the provision of housing, medical care, and food, in addition to basic pay.

2. Accession Efforts

As the importance of retention flourishes, so do accessions. In today's military compensation system, many S&I payments are awarded to individuals who agree to remain on active duty. Other S&I payments are provided as signing bonuses for recruitment or accelerated promotions after boot camp. Reportedly, the military must compete for recruits from a population of 800,000 eligible high-school graduates every year. These 800,000 prospects consist of individuals who qualify for active duty[18] out of approximately 2.7 million. This scarce resource is further divided between all four service branches as well as civilian employment industry, colleges, and universities. The competition for recruiting young, able-bodied service members is fierce.

Due to increased competition for new recruits and incredible economic expansion during the past 10 years, the military has had a difficult time reaching its recruiting goals.[19] Primary "weapons" used to fight the "war for talent," are compensation, nonpecuniary benefits, such as college funding, and job skills for future employment

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[17] The policy "up or out" pertains to the military forcing separation of members who fail promotion twice consecutively at anytime during their career.

[18] 800,000 was calculated from total annual high school graduates (approximately 2.7 million annually) possessing qualifications determined acceptable for active service.

[19] During FY 1999, the Air Force missed its recruiting mission by 3000; the Navy by 5000; the Army by 6000. Only the Marine Corps achieved its stated recruiting mission. FY 2000 forecasts provide a similar grim picture. The reasons provided for "missing mission" were referenced from SASC, 1999, p.12.

possibilities. A hard look at military compensation, and its place among performance and promotion, is required more today than in years past. Traditional strategies of compensation management lend themselves to myopia and incrementalism. At the current juncture, in consonance with civilian firms competing for the same 800,000 high school graduates, incrementalism may prove catastrophic; a revolution in military compensation strategy, on the other hand, may prove immensely beneficial.

3. Occupational Specialty Funneling

In the civilian sector compensation rests upon the nature of work being completed. The understanding that certain payments depend upon type of work is taken for granted. Some jobs simply pay better than other jobs depending upon many reasons. Regardless of theories that may be employed to rationalize and explain differences in the labor market, the point to remember is that differentials have important effects upon employment. Armed services must seek qualified volunteers in the civilian sector and must compete to retain those whom they have already trained. (Binkin and Kyriakopoulos, 1981, p.26)

The armed services' task is doubly difficult because occupational specialties existing in the modern military are limited and the range of jobs and pay packages the civilian sector offers is so wide and varied. (Binkin and Kyriakopoulos, 1981. p.26) The military does not provide the vast compensation spectrum provided by the civilian sector. Not only is a single basic pay schedule used for personnel, in all services, but it also applies to all occupations and individual specialties. Payment rates are set to correspond to specific ranks and vary with longevity but not by occupational performance or individual ability.[20] "The near total absence of occupational differentials is by far the most striking feature of the military pay structure's difference from civilian structures." (Binkin and Kyriakopoulos, 1981, p.27) Recently, however, bonuses and re-enlistment incentives have been used in the military.

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[20] Excepting a select few dealing mostly with professional job skills, such as doctors, lawyers, and pilots.

Binkin states the problem of occupational specialty funneling best:

> All of this might be expected as a natural outcome of a pay system that views all tasks as equally important and those who perform them equally productive. But that assumption must be challenged. The military in effect fails to recognize that some jobs are perceived as being less attractive, more difficult, less demanding, or simply better or worse than others; some may actually be better or worse than others. The armed forces, by offering equal pay for unequal jobs, assign as prominent a role to, say, the enlisted clerk as to the combat soldier; yet recruitment for combat-related positions has always been more difficult. The failure to offer pay differentials to enlisted technicians and craftsman is inconsistent with the service's growing needs for these specialists. All in all, it is likely that because of the military pay system and by its product—the pay structure—the Army, and to a much lesser extent the Marine Corps, are having trouble attracting recruits for combat jobs while the Air Force and Navy have relative success, the "hemorrhage of talent" is alarming. These factors are compounded by the neglect of performance in most situations. (Binkin and Kyriakopoulos, 1981, p.30)

I. CHAPTER SUMMARY

This chapter provides an overview of military compensation, its form and function, down through history to its current state. It provides reasons and explanations as to why military compensation exists in its current form and documents the elements of pay: basic pay, subsistence and quarters allowances, and current special and incentive pays. Also presented is a discussion of current military pay structures, its flaws and possible remedies. Last, an explanation of the military-civilian pay gap and an explanation of the military retirement system are presented. It is important to understand all information and concepts presented in this chapter for the next delves into a similar discussion for the civilian sector. To effect a cogent discussion on the similarities and differences between the two larger pay categories, military and civilian, consistent definitions and solid groundwork must be constructed between the two.

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III. OVERVIEW OF CIVILIAN COMPENSATION

When you overpay small people you frighten them. They know that their merits or activities entitle them to no such sums as they are receiving. As a result, their boss soars out of economic into magic significance. He becomes a source of blessings rather than wages. Criticism is sacrilege, doubt is heresy.

Ben Hecht (1893–1964), U.S. journalist, author, screenwriter

A. INTRODUCTION

Civilian firms, unlike military organizations, tailor remuneration systems to specifically maximize employee effort and increase profits. The rationale is based upon contingency notions.[21] That is, differences in a firm's business strategy are supported by corresponding differences in its human resource strategy, including compensation. When the environment becomes increasingly tumultuous, as recently seen in the civilian sector, then systems used to remunerate become more flexible. This difference between civilian and military compensation, in terms of flexibility, is important. Civilian firms possess flexibility to modify their systems at a much faster rate than the military. (Milkovich, 1999, p.24) For civilian firms, the results are a better alignment between organization goals, structure, compensation systems, and the external environment, all leading to increased effectiveness. (Mintzberg, 1992, p.802) Therefore, with focus upon enhancing worker performance, we turn to the civilian sector and analyze their use of direct and indirect compensation techniques and their relative success with each.

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[21] This statement is based upon the 8th QRMC's conclusion that Contingency Theory is important when discussing parity between military and civilian compensation. Contingency Theory states that "there is no one best organizational form but several and their suitability is determined by the extent of the match between the form of the organization and the demands of the environment." (8th QRMC, 1997, p.101)

B. DIRECT COMPENSATION TECHNIQUES

Figure 3.1 illustrates the variety of returns individuals may receive by providing work. Financial returns are only one aspect of total compensation provided an employee for his/her labor. Nonfinancial or indirect returns are another important form of compensation. (Lazear, 1999, p.345) Nonfinancial returns are discussed further in the next paragraph, focusing primarily upon fringe benefits within Figure 3.1. As a matter of clarification, total compensation includes pay received directly as cash or indirectly as fringe benefits or services. Programs that distribute compensation to employees can be designed in an unlimited number of ways. A single employer typically uses more than one program or scheme to compensate employees. Major categories of direct compensation in the civilian sector, include base wage, merit pay, short- and long-term incentives, and employee benefits and services.

A continuing debate on what aspects of "returns for work" are most influential has existed for some time. The purpose of this thesis is not to determine, nor espouse, a single theory that puts that debate to rest; however, looking at the entire compensation package and incrementally improving each of its components may prove beneficial.

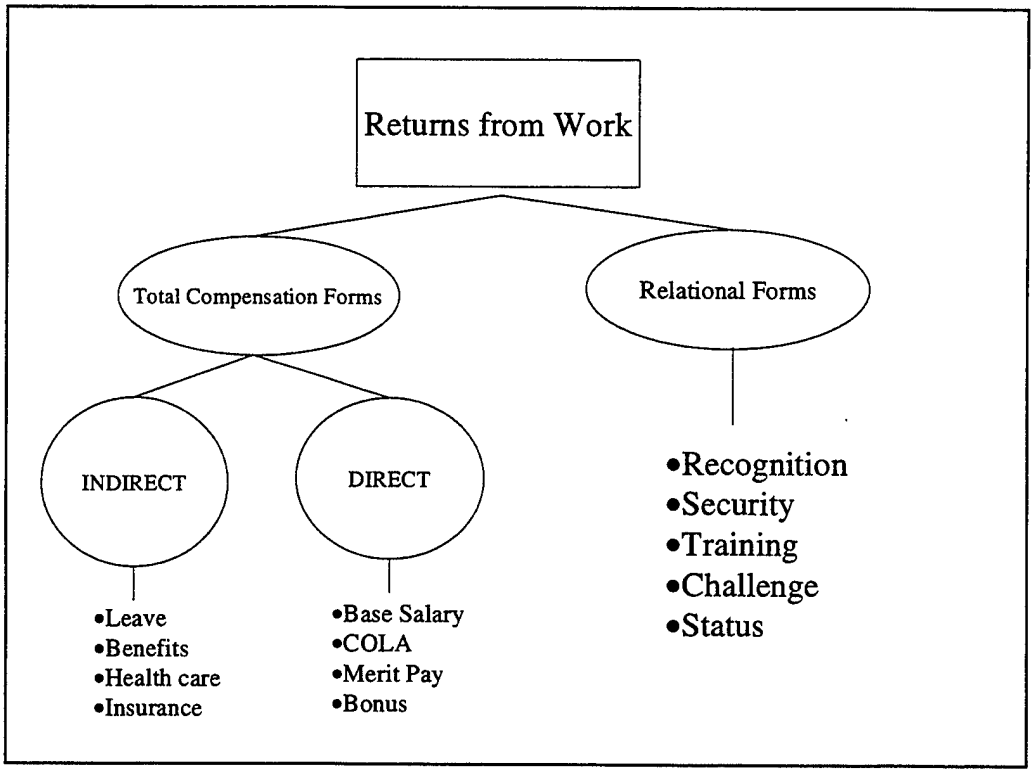

Figure 3.1. Total Returns to Employees in Exchange for Work

When analyzing compensation in its many forms, it is important to keep in mind from what perspective it is being viewed. Similar fixtures of compensation can be seen very differently depending on the viewpoint of the employer or employee. Four perspectives are important when looking at civilian compensation. They are that of: society,[22] stockholders, employees, and management within the organization. Each perspective provides its own set of "stakes" in compensation decisions. More important, differing perspectives can cause confusion unless all players are talking, and meaning, similar things. (Lazear, 1998, p.133)

[22] Society, in this usage, refers to the culture, mores, and ethics of the organization as a whole.

1. Salary and Wage

Base pay is the fundamental reward employers provide employees for work performed, effort exhibited, or productivity. Civilian base wage, similar to the military's, tends to reflect longevity or skill levels. Most civilian firms set base wages to perceived skill and education credentials an employee possesses. Periodic adjustments to base wages occur when deemed appropriate to inflation, cost of living, or other influences within the labor market. Other changes to base pay can be related to modifications of an individual's experience, performance, skill, or abilities, changing the basic make-up of an employee's worth to the firm. (Milkovich and Newman, 1999, p.6)

A distinction is often made between the terms "salary" and "wage." Salary refers to pay for workers who are exempt from regulations pertaining to "Fair Labor Standards Act," and do not receive overtime compensation. These employees are, appropriately, known as "exempts." Those who are employed as managers and professionals usually fit this category. Their compensation, or salary, is computed for an annual or monthly stipend rather than hourly or piece-rate. Conversely, employees who record and are compensated for overtime are known as "non-exempts." Their wage is calculated at an hourly or piece-rate. (Milkovich and Newman, 1999, p.7) Some civilian employers, such as Hewlett-Packard and IBM, label all "base pay" as salary in an attempt to support a management philosophy that employees are working as a team, rather than a strict division between those who receive salary and those who work for wages.

2. Hourly

When discussing provisions of hourly compensation, an explanation of payment by *input* versus *output* is helpful. A key feature of output-based pay is its dependence upon a measure of what is produced, not on a measure of time or effort that goes in. When workers are paid for output, the amount of time spent on a project does not affect the firm's willingness to compensate. It is rather a piece-rate function that holds the most importance; this topic will be discussed further in the next section. Input-based pay is

compensation that depends on the amount of time, or effort, spent on an activity or labor. (Lazear, 1999, p.99) It is independent of output considerations. Input is not easy to measure, but firms use "proxies" to assess input effort. The most commonly used measure of work input is time at work.

Technically, even workers on a monthly or annual salary are paid for time worked. Just as an hourly wage does not consider the exact number of seconds per hour that are actually worked, a salary does not take into account exact numbers of hours per month, or year, that are actually worked. Most workers in the civilian sector are paid salaries or hourly wages based upon input rather than output. (Lazear, 1999, p.115) The important difference between salaries and wages is what unit of time provides the most efficient and effective measurement of effort.

A number of factors push a firm away from paying piece-rates and toward paying salaries or hourly wages. The first, and most important, is that it is often costly to measure output. Another reason is variability of jobs within civilian firms; all tasks within a firm may be highly varied and nonrepetitive. A single compensation plan may not be optimal for all employees in all situations. Further, it is often argued that paying piece-rates induces workers to focus on quantity instead of quality. However, according to Lazear, piece-rates do not necessarily skew a firm's employee production from quality toward quantity. A firm's exact compensation formula determines the balance on quality versus quantity. (Lazear, 1999, p.115) Firms, having the power to define performance, should sculpt their compensation plans accordingly.

When effort is not easily measured, the best proxies are work input and time at work, which also provides the easiest measures as to what wages and salaries should be within civilian firms. In the case of assembly line workers, hours worked may not be a perfect proxy for effort, but may be a good indicator of the amount of effort expended. Since the assembly line is moving at a fixed rate, the speed of the line combined with the amount of time spent on the line, by a worker, are the main components in probable production completed. For managers, the same adage holds but the accuracy of the proxy is diminished. Managers' tasks are relatively random and less routine. Once managers

have selected their specific tasks (another important component of being a manager is the choice of specific tasks), the hours worked become less important. Instead, managers are provided flexible contracts specifying general sums of money for understood, relatively undefined tasks geared toward accomplishing goals, productivity levels, or set working conditions. A general principle is that the more difficult it is to state tasks, the longer the time period for compensation (i.e., monthly or annual salary). (Lazear, 1999, p.118)

3. Piece Work

Compensating employees on the basis of output has its advantages. Output pay, by most accounts, induces a good worker to stay and a bad worker to leave a specific firm. Also, output-based pay motivates workers to put forth effort instead of merely showing up for work. According to Lazear:

> Firms that use piece-rate pay generally attract higher quality workers than those that pay straight salaries, but firms that pay piece-rates pay higher average wages and may bear greater monitoring costs. (Lazear, 1999, p.58)

Output-based pay can serve as a screening mechanism for workers. If workers are paid according to their output, they will leave whenever payments fall short of potential wages at their next best alternative of employment. (Lazear, 1999, p.100) Conversely, all workers whose payments exceed that of the alternative job stay with their current employer. The firm that pays piece-rate cannot pay its workers more than they produce; those who stay are also those whose output exceeds production in the alternative job. They are, therefore, workers who also stay at their current employment longer. (Lazear, 1999, p.100)

Payments based on piece work provide workers direct incentives, or motivation, to produce more. This same fixture of piece-rate pay can be applied to performance-based compensation. Instead of compensating employees on how much they produce (output), compensation is based upon perceived performance of workers by management. In this regard, although measurement becomes subjective, the desired output of an

employee, as observed by a supervisor, becomes linked to rewards received. Issues can arise when subjective performance appraisals are linked to compensation. For example, instances arise in civilian firms where it is unclear whether performance is based upon absolute or relative behavior; this causes confusion with employees. Therefore, performance-based compensation plans must be explained and articulated in detail prior to implementation.

Another important area of discussion, when analyzing piece-rate pay in the civilian sector, is "sorting." Sorting workers based upon their specific characteristics and skills may lead to "adverse selection." Adverse selection is a process of employing the wrong workers due to misdirected compensation or incentive plans. The forces of "sorting" and "adverse selection" may seem subtle at first glance, but they have far-reaching effects. Therefore, it is critically important for civilian firms which compensate on output to provide proper hiring and human resource management schemes that result in desired outcomes. Interestingly, those times that incentives do not seem to work effectively are often times they actually work well. Expecting "B" to occur, while incentivising "A," may lead one to determine that incentives do not work at all; the truth is the opposite.

4. Other Factors of Direct Compensation

Despite advantages of piece-rate pay, it does have one large disadvantage. Sometimes, variations in output are beyond the control of individual workers and firms. Economic downturns, supplier malfunctions, and reductions in raw materials required for output, are but few examples. A firm that "smoothes" these disruptive ebbs and flow will find it easier to attract labor while paying somewhat less. This component of piece-rate pay explains certain behavior of workers known as "risk aversion." Workers will be willing to receive smaller amounts of pay if payments are guaranteed to be stable and timely. Of course, when salary is paid to workers, the firm provides the insurance of remuneration, meaning the firm is now assuming risk, another insidious form of cost. (Milkovich and Newman, 1998, p.345)

Another effect related to civilian compensation is "intermediation." The method of compensating workers for their effort generally differs from methods of compensating the firm for products they produce. For many products, the procedures and mechanisms of production and selling are straightforward. Sales are easily measured at the firm level, but much less easily measured at the worker level. (Lazear, 1999, p.120) Therefore, the same variables used to measure expense and revenue of a company may not be the same variables used to measure worker productivity. This leads to "lack of harmony" between measures of production for the firm and measures of productivity for individual employees.

Developing a compensation scheme for firms can have numerous pitfalls and unintended consequences. An example is when managers focus more on the short run and ignore the long run. The view is that a manager's time horizon differs from that of shareholders and employees. Supporting evidence is shaky, but if assumed true, it reflects a failure to construct incentives appropriately for the manager, or the manager's failure to incentivize proper behavior from subordinates. Three possible solutions to this problem are presented by Lazear: first, make managerial compensation a function of stock appreciation; second, pay managers for actions that promote long-term performance; and third, pay for input and instruct managers to place appropriate emphasis on the long run. (Lazear, 1999, p.122) Put simply, compensate employees for those things that the firm desires an individual to accomplish. Factors such as these present a template for solving compensation issues found in the military. However, as in the example of a manager with myopic tendencies, the same approach to determining weaknesses of military compensation systems is required.

C. INDIRECT COMPENSATION TECHNIQUES

Wages can be compared between competing employers; unfortunately, compensation packages that include nonpecuniary components may be very difficult to compare. If two jobs at differing firms are identical, except for their direct monetary compensation, the firm to be selected by a prospective employee is rather simple—who

pays more? If a dollar wage offered by the competitor exceeds that being paid by the current employer, logic tells us that the worker would accept the offer and leave. Under these conditions, the outside offer is a credible threat to the current employer. (Lazear, 1999, p.216)

In reality, evaluating job offers or employment situations is not that simple. Much of what a worker receives on the job is what Lazear terms "psychic." Working conditions, status, flexibility, and value of a particular geographical location may be quite important, but possess different values to different individuals. When nonpecuniary aspects of a job are important, it is difficult for an employer to objectively evaluate the significance of an outside offer or trend in compensation. (Lazear, 1999, p.237)

Clearly, workers care about job characteristics beyond just pay and compensation, and are willing to accept lower wages in order to have a job with more desirable nonpecuniary characteristics. But workers differ in their valuation of various nonpecuniary factors. Money provides a convenient metric and one used by most economists when analyzing indirect compensation methods. Therefore, most discussions on this topic, and most energy in studying it, is in converting nonpecuniary factors into market data consisting of monetary equivalents. (Lazear, 1999, p.402) Unfortunately, this method is wrought with inaccuracy. (Lazear, 1999, p.402)

The following sub-sections discuss some common indirect compensation fixtures found in the civilian sector.

1. Health Insurance

Table 3.1 provides a brief overview of the three most common health care options available within the civilian sector.

Table 3.1. Current and Common Health Insurance Options Available in the Civilian Sector

ISSUE	TRADITIONAL COVERAGE	HEALTH MAINTENANCE ORGANIZATION (HMO)	PREFERRED PROVIDER ORGANIZATION (PPO)
Who is eligible?	May live anywhere and receive coverage	May be required to live in HMO designated service areas	May live anywhere and receive coverage
Who provides the care?	Doctor and health care facility of patient's choice	Must use doctor and facilities designated by HMO	May use doctor and facilities associated with PPO; if not, may have to pay deductibles
How much coverage on routine, preventative level care?	Does not cover regular check-ups. Diagnostic tests are covered	Covers regular check-ups, tests, and preventative services for low fee	Same as HMO if doctor and facility approved; Copayments required if not approved
Hospital care	Covers all doctor and hospital bills	Covers doctor and hospital bills if HMO approved	Covers doctors and hospital bills if PPO approved
Percent of all employees enrolled in these programs, yearly	1993: 48 percent 1997: 15 percent	1993: 19 percent 1997: 30 percent	1993: 27 percent 1997: 35 percent

Source: Wall Street Journal, 20 Jan 1998. Enrollment data from WM. Mercer, Inc.

An employer's share of health care costs is contributed into one of five health care systems: (1) a community based system, such as Regional Blue Cross/Blue Shield; (2) a commercial insurance plan; (3) self-insurance; (4) a Health Maintenance Organization (HMO); or (5) a Preferred Provider Organization (PPO). (Milkovich and Newman, 1998, p.436)

Regardless of cost control strategies, short- and long-term disability benefits, dental insurance requirements, and vision care, are benefits that have been with us, and

will probably remain with us, for some time. Until medical care inefficiencies of the United States are solved by either government or free market intervention, health insurance will remain an important part of many civilian employment packages.

2. Pay Bonuses

Pay bonuses, for the most part, recognize an employee's positive past behavior and accomplishment. Pay bonuses may take the form of variable pay or the more widely used merit-pay plans. Given as additional increments to base pay or additions to salary or wages, pay bonuses typically vary with performance. Thus, outstanding performers typically receive a compensatory bonus relative to individual, team, and/or firm performance during a past quantified time period. (Milkovich and Newman, 1998, p.7)

Of late, annual bonuses have played a major role in civilian executive compensation and are designed to motivate better performance and behavior. Bonus compensation has become more popular in today's corporate culture. (Heneman, 1995, p.145) Further, it has trickled into the lower echelons of management. Only 15 years ago, 36 percent of companies gave annual bonuses; today, bonuses are an important part of 90 percent of top-level and mid-level management compensation packages existing in 72 percent of all companies. (Lazear, 1999, p.432) Table 3.2 provides trends in corporate executive compensation using three decades of data.

The 1970s are known as the era of turning raw material into product, the 1980s were marked with a focus upon quality and the 90s centered upon re-engineering. Most futurists agree that the era of 2000 will concentrate upon velocity of service and speed of product delivery. Further, they forecast that by 2010 the most competitive firms will possess attributes of all three: quality, re-engineering, and speed. That said, it is important to see how compensation has moved with these theories of "better business practices" over time.

Table 3.2. Percent Breakout of Executive Compensation Components by Decade

Compensation Component	Percent During 1970s	Percent During 1980s	Percent During 1990s
Base Salary	60	40	27
Benefits	*	15	7
Perks	*	5	Unknown
Short-term Incentives	15	20	43
Long-term Incentives	5	20	23

*Unreported

Source: Various issues of the Wall Street Journal and data from Towers Perrin, Wyatt Co.

One trend is apparent from the data presented in Table 3.2. Companies are placing more and more emphasis on incentives at the expense of base salary. Such a change in emphasis signals the growing importance attached to ensuring profitability and survival of companies. (Milkovich and Newman, 1998, p.458) The technique used to ensure competitive advantage within the compensation system has been a reliance upon pay for performance.

3. Nontaxable and Nonpecuniary Compensation

The 1990s witnessed nonpecuniary compensation becoming a stronger element in civilian sector remuneration. Four nonpecuniary compensation elements are: paid time off during working hours, payment for time not worked, child care, and legal insurance. As for paid time off during working hours, we see things such as paid rest periods, lunch periods, exercise and wash-up time during the work day, clothes-change time, and get-ready time. (Milkovich and Newman, 1998, p.440)

Payments for time not worked deserve more discussion. Included in this category are several benefits as presented and explained by Lazear:

- Paid vacations and payments in lieu of vacation
- Payments for holidays not worked
- Paid sick leave
- Other (this category includes payments for National Guard or Army or other reserve duty; jury duty and voting pay allowances; payments for time lost due to death in family or other personal reasons.)

15 to 20 years ago, it was rare to see firms grant paid time off for anything other than formal vacations, holidays (federal or otherwise), and sick leave. Although rare, some firms today possess policies ensuring payment for civic responsibilities or obligations. Outside civic duty pay (like jury duty) is usually nominal so the firm provides a supplement to payment. There are also trends toward increasing benefits for parental leave for both mother and father. Maternity, and to a lesser extent paternity leaves, are more common than during past decades. (Milkovich and Newman, 1998, p.440) Table 3.3 provides recent calculations of average time off of employees in different employment cultures, including the military.

Table 3.3. Benefits for Time Not Worked in Four Major Organizations

Benefit	Medium and Large Private Firms	State and Local Government	Small Private Firms	U.S. Military
Paid Holidays (days/year)	10.2	14.2	9.2	14.5
Paid Vacation at 1 Year (days/year)	9.4	12.4	7.6	30*
Lunch Break (minutes/day)	29	34	Variable	60
Rest Time (minutes/day)	26	29	26	As needed
Personal Leave (days/year)	3.1	2.9	2.6	30*
Funerals (days/year)	3	3.7	2.9	30*
Military Leave (days/year)	14	17	12.2	N/A
Maternity Leave (Months)	4.3	4.5	3.5	2

Source: EBRI Data book on Employee Benefits, 1995.
*Provides a 30-day period which can be used for purposes of vacation, leave, and/or funerals. It does not provide 30 days for each category.

Although few civilian companies provide day care as an employee benefit, the trend seems to be growing. Reasons for this are varied; however, the increasing existence of working moms is a significant contributor. There is a greater concentration of child care benefits in certain industries. For instance, in the insurance industry, child care is seen as a tool or incentive to attract, and more importantly, retain employees. (Milkovich and Newman, 1998, p.442)

Prior to 1970, prepaid legal insurance was practically nonexistent. Coverage is still limited to approximately 7 percent of all employees, and generally only in medium to large firms. (Cragg, 1997, p.69) Tremendous variety exists in the structure, options, delivery systems, and attorney compensation mechanisms. Employees with legal

problems either choose legal counsel from a panel of lawyers selected by the firm or freely pick their own with claims reimbursed by an insurance carrier. (Milkovich and Newman, 1998, p.442)

4. Other Material Benefits and Their Structure

One problem with providing specific benefits is that similar benefits do not suit every worker or employee the same. Lazear presents an example of this: older workers are very concerned about health care benefits, but not concerned about child care. Conversely, young workers find themselves more concerned about child care and less about specific pension programs. (Lazear, 1999, p.414) A *cafeteria plan* provides an employee more flexibility in benefit choices as well as the amount of benefit. Although cafeteria plans vary by specifics and general areas of choice, the idea is to provide an employee with a fixed amount of "benefit dollars" which he can spend on benefits that are most appropriate to him. This scheme avoids providing a blanket policy for all employees when only a fraction are concerned with a specific type of benefit, also known as economic rent.[23] (Lazear, 1999, p.412)

Regardless of structure, nonpecuniary benefits have slowly become more important in civilian compensation packages. Benefits, such as company cars, child care, subsidized memberships to clubs and restaurants, legal insurance, movie tickets, and time-share vacation spots, have all found their way into civilian compensation packages.

D. DEFINED BENEFIT FORMULAS

Employee benefits are intended to promote economic security by insuring against uncertain events and to raise the standards of living by providing certain services.

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[23] "Economic rent is the excess of the payments to the factor over its opportunity cost." (Ruffin and Gregory, 1984, p.771) Refer to Lazear's example of elderly versus youth and what priorities they have for benefits. A firm that weights its nonpecuniary benefits heavily on retirement instead of child care is paying economic rent by providing the benefit of retirement to all employees of whom only a percentage are interested. The youth would work for the firm regardless of the existence of retirement benefits; therefore "rent" is being paid to them.

(MacDonald, 1998, p.57) Today's employment-based benefit programs represent a commitment to provide some measure of security to active employees, displaced and disabled workers, and their families. Most Americans receive some form of employee benefits at some time during their lives. Those who do not receive payments are likely to receive remuneration under a public program. (MacDonald, 1998, p.57) Nearly all U.S. workers are covered under social security or Old Age, Survivors, Disability, and Health Insurance (OASDHI). Further, more than one-half of all full-time workers are covered by private employment-based pension plans. (Salisbury, 1994, p. 67)

The difference between employment-based pensions and individual savings for retirement has become blurred by the continued growth of defined contributory benefit plans as both primary and supplemental retirement options. Plans such as Section 401(k), 403(b), 457, and individual retirement accounts (IRA) allow participants to determine contribution levels and respective asset allocation. (MacDonald, 1998, p.59) Civilian retirement plans also provide deferred compensation fixtures similar to military retirement plans.[24] Further, civilian retirement plans have introduced portability and transferability of retirement benefits, diminishing loyalty to one particular company or employer.

In 1997, the U.S. Congress provided legislation[25] allowing employees to save more money of their own for retirement on a tax-deferred basis, and provided other separate types of plans for special needs of small businesses and self-employed individuals. (MacDonald, 1998, p.59) Recent trends instigated by changing societal attitudes, demographics, and economic conditions have focused civilian retirement planning toward a combined benefit and contribution system.

There are many differences between public and private sector defined-benefit plans. In many public plans, employers are required to contribute toward the cost of the

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[24] Military retirement takes the form of deferred compensation according to some experts. The idea of working now for additional compensation much later in life defines the concept.

[25] Tax Relief Act of 1997

plan, including cost-of-living adjustments. Fewer private plans explicitly include such features as COLA. Also, public-sector employees are more likely to be covered by defined benefit plans than private-sector counterparts. (MacDonald, 1998, p.61) According to recent Department of Labor and Statistics estimates, 56 percent of private sector employees participate in retirement benefit plans as opposed to 91 percent in state and local governments and 90 percent in federal government positions. (Salisbury, 1994, p.59)

In a defined-benefit plan, employers agree to provide employees a benefit amount at retirement based on a specific formula. (MacDonald, 1998, p.59) According to MacDonald, formulas generally fall in one of three general types: a flat-benefit formula, a career averaging formula, or a final-pay formula. The formulas are presented below:

1. Flat-Benefit Formula

For each year of service recognized under this plan, the flat-benefit formula pays a flat dollar amount. These plans are not as common as other benefit formulas, but they do provide an uncomplicated approach to benefit formulation.

2. Career Averaging Formula

As explained by MacDonald, there are two types of career-average formulas. Under the first type, participants earn a percentage of pay allocated for each year they participate. The second type averages the participant's annual salary over the period of plan participation. At retirement, the benefit equals a percentage of career average pay, multiplied by the number of years of service. (MacDonald, 1998, p.60)

3. Final-Pay Formula

Final-pay plans base benefits on average earnings during a specified number of years at the end of a participant's career, when earnings are theoretically highest. The benefit equals a percentage of a participant's final average earnings, multiplied by the

number of years of service. This formula specifically provides inflation protection to the participant, but can also represent higher costs to the employer. (Salisbury, 1994, p.56)

E. PAY FOR PERFORMANCE IN THE CIVILIAN SECTOR

Most U.S. employers use a pay-for-performance approach in determining employee pay levels. (IMA, 2000, p.12) While a wide range of performance measuring techniques and approaches exists, including different evaluators, criteria of performance, and the specific relationship to compensation, no perfect approach has yet been developed. However, the trend in civilian sector compensation is toward pay-for-performance schemes. (IMA, 2000, p.13)

Table 3.4 provides a listing and summary of forty studies on civilian sector pay and performance between 1968 to 1988. The presented research was conducted on numerous private- and public-sector firms and brings together a group of studies on the topic of performance-based pay. The research concludes that a positive correlation exists between compensation and employee performance.

Table 3.4 is structured as follows:

- Column 1 provides the author and date of the study.
- Column 2 provides the "N" or population participating in the study.
- Column 3 describes the types of jobs or occupations of the study's subjects.
- Column 4 presents the general category of the participant's organization or firm.
- Column 5 notes whether the study was conducted in an environment where performance-based pay was being used (field) or where the researchers simulated a situation where performance-based pay was used (lab).
- Column 6 shows the sign linked to the results of the study. A positive sign indicates that a positive relationship was observed between performance and pay increases. That is, the ratings of an employee's performance increased, pay increased as well. A negative sign indicates that as ratings increased, pay decreased.
- Column 7 shows the significance of the results. Significance indicates the degree of certainty in the results. The smaller the number in the column, the less likely reported results are due to chance associated with the selection of participants in the study.

The data clearly indicate that a positive relationship exists between performance and pay in the civilian sector. In a small number of the studies, the results were not statistically significant, but this could be due to small sample size. The positive relationship between pay and performance seems to be robust. It has been observed in the laboratory and field settings, within private- and public-sector civilian organizations, service and manufacturing jobs, and at many job levels as demonstrated by these studies. (Heneman, 1992, p.47)

Following Table 3.4 is a detailed discussion on three specific studies possessing strength in articulating the relationship between pay and performance.

Table 3.4. Summary of Research Showing Relationship Between Compensation and Job Performance

Author and Year	(N) Population	Participants	Organization	Research Type	Correlation Sign	Significance (p<)
Alexander and Barrett (1982)	4582	Managers, Scientists, Students	Int'l Research Group	Lab	+	.001
Bass (1968)	113	Students	University	Lab	+	*
Birnbaum (1983)	10	Faculty Members	University	Lab	+	*
	125	Students	University	Lab	+	*
Bishop	456	Professional	Private Sector	Field	+	.01
Dreher (1981)	1414	Employees	Manufacture Company	Field	+	.05
Fossum and Fitch (1985)	20	Students	University	Lab	+	.001
	40	Managers and Professional	Private Sector	Lab	+	.001
	42	Managers and profession	Private Sector	Lab	+	.001
Foster and Lynn (1978)	56	Managers	Private Sector	Lab	+	*
Gerheat and Milkovich (1987)	5550	Admin and Profession	Diversified Firm	Field	+	.01
	840	Admin and Profession	Diversified Firm	Field	+	.01
Goodman (1975)	65	Students	University	Lab	+	.05

Greene (1973)	62	Managers	Manufacture Company	Field	+	.01
H, Heneman (1973)	68	Managers	Retail Firm	Field	+	.01
R. Heneman and Cohen (1988)	175	Employees	Manufacture Company	Field	+	.01
Hills, et al. (1988)	1255	Employees	Transit Authority	Field	+	.001
Huber, et al. (1987)	229	Managers	City Government	Lab	+	.001
Ivancevich (1983)	66	Scientists	High Tech Firm	Field	+	.01
	104	Engineers	High Tech Firm	Field	+	Not Significant
Johnson and Kasten (1983)	32	Faculty Members	University	Field	+	.05
Kaun (1984)	144	Faculty Members	University	Field	+	.01
Kopelman (1976)	142	Engineers	Technical Company	Field	+	.01
	138	Engineers	Technical Company	Field	+	.01
	119	Engineers	Technical Company	Field	+	.01
Lazear (1996)	3707	Employees	Private Firm	Field	+	Varied
Leventhal, et al. (1972)	120	Students	University	Lab	+	.01
	44	Students	University	Lab	+	*
Landau and Leventhal (1976)	120	Students	University	Lab	+	.01
Magnusen (1987)	40	Faculty Members	University	Field	+	*
Markam (1988)	71	Managers	Manufacture Company	Field	+	Not Significant
Medoff and Abraham (1980)	2763	Employees	Manufacture Company	Field	+	Varied
	2491	Employees	Manufacture Company	Field	+	Varied
Medoff and Abraham (1981)	7078	Managers and Profession	Manufacture Company	Field	+	Varied
Scott, et al. (1987)	800	Employees	Transit Authority	Lab	+	Varied
Sherer, et al. (1987)	11	Managers	Hospital	Lab	+	.01
Teel (1986)	*	Profession	Private Firm	Field	+	*

Turban and Jones (1988)	25	Managers	Rehab Center	Field	+	.05
Vecchio and Terborg (1987)	67	Students	University	Lab	+	*
Wyatt Company (1987)	1415	Profession	Private Sector	Field	+	*

* Information not included in published material
Source: Adapted from R. Heneman, 1992

1. Detailed Discussion of Specific Studies

Three studies from Table 3.4 are presented here and discussed in greater detail. The first study, by H.G. Heneman in 1973, studied the relationship between managerial performance and pay in a large department store with an explicit system of performance measurement and reward. As explained by Heneman,

> Job level, length of service, and amount of education were also included as independent variables. Due to the possibility of unstable performance and to the influence of nonperformance factors in pay, it was expected that performance would predict pay changes better than pay levels. Results of partial correlation analysis confirmed the expectation. In addition, job level and length of service were predictive of pay levels and pay changes, respectively. Education was not predictive of either pay levels or changes. Results of multiple regression analysis indicated that the four independent variables accounted for approximately 50 percent of the variance in the dependent variables. (Heneman, 1973, p.128)

Heneman also concluded that a central tenet of worker motivation is that rewards will motivate high employee performance only if they are systematically related to performance. Therefore, rewarding performance with pay requires that pay changes be linked to performance during a given time period. (Heneman, 1973, p.130) Finally, the most important conclusion derived from Heneman's study was: "Managers with the highest levels of performance tended to be rewarded with the largest percentage increases in pay, even after controlling for the effects of job level, length of service, and education." (Heneman, 1973, p.130)

A study by Magnusen in 1987 titled *Faculty Evaluation, Performance, and Pay* examined the method and salary results of a job-related evaluation process. The job-related evaluation process was used in the early 1980s by department chairs in a large, unionized state university system. (Magnusen, 1987, p.516) Because of collective bargaining agreements, department chairs in Magnusen's study were required to make annual, written faculty evaluations which, implicitly, had an impact on salary recommendations. The method involved a goal-setting plan in which work assignments were discussed with faculty early in the year and results reviewed at year's end. Goal-setting categories included teaching, scholarship, and service, and were "scored" by the chairperson at year's end. (Magnusen, 1987, p.517)

Once individual performance scores were determined, faculty were point-ranked within departments and each chairperson determined respective performance cut-off points; such as, excellent, very good, good, satisfactory, and unsatisfactory. The chairperson to determine salary adjustments then used performance categories. (Magnusen, 1987, p.517) Magnusen opined that although the evaluation method seemed useful as a means to focus on given criteria of performance, the chairperson was aware that various rating scales did not produce an absolute continuum of performance or represent mutually exclusive rating categories. (Magnusen, 1987, p.521) He also went on to state that the evaluation system tended to focus on the extremes of high and low performance, and as such evaluators may overlook the contributions of individuals who, while not top rated, are strong and consistent performers, a.k.a. "solid citizens."[26] (Magnusen, 1987, p.525)

Magnusen concludes his study with the following:

> Perfect appraisal systems do not exist; yet reasonable approximations of performance can result from methods that link job assignment to generally accepted performance criteria. [This article] has reviewed one such

[26] Magnusen expounded upon the "Solid Citizen" concept by stating that they provide stability, continuity, and critical mass for keeping the organization on track toward its basic mission. Reward systems that emphasize only top performers risk bypassing an important segment of organizational members. (Magnusen, 1987, p.525)

> method used by department chairpersons in a university business school. The method assisted chairs in making systematic ratings of faculty performance in the areas of teaching, scholarship, and service. These ratings were used to make annual faculty evaluations and salary recommendations successfully....When pay and performance are not clearly linked, skepticism about evaluation processes and rewards is likely. (Magnusen, 1987, p.527)

Last, Greene conducted a study of 62 managers[27] over a two-year period on the *Casual Connections Among Managers' Merit Pay, Job Satisfaction, and Performance.* (Greene, 1973, p.95) The study investigated the source and direction of influences in the relationship among performance-based pay, job satisfaction, and actual performance. The results indicated that "merit pay" caused "satisfaction" and that pay increased the correlation between these two variables. However, satisfaction was found to be an effect, and not the cause, of performance. Greene went on to state that:

> The influence of performance was to increase the correlation between performance and satisfaction. The merit-pay-causes-performance hypothesis was not supported, but the results suggested the possibility of reciprocal causation. (Greene, 1973, p.95)

Performance of the study's participants was measured by two peers using a 7-point semantic differential scale allowing the raters to evaluate quality and quantity of the manager's performance. Salary increases, performance-based pay, and company pay records were sources of merit pay measurements. Job satisfaction was measured by survey. The analytical procedure was a crossed-lagged panel correlation technique.

Results from Greene's study were three-fold: (1) Merit pay causes job satisfaction; (2) Performance causes merit pay; and (3) Job satisfaction does not cause performance.

Table 3.4 provides evidence that properly sculpted performance-based compensation schemes result in increased performance from participating employees. The modern civilian sector views pay programs as key management tools. (Risher and

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[27] The managers represented both the line and staff functions of the marketing and financial divisions of a large manufacturer of business and communication equipment.

Fay, 1997, p.207) The goal of performance improvement requires organizational behavioral change: people have to approach work with new attitudes and new behaviors, and they need incentives to overcome their comfort with work as usual. (Risher, 1997, p.15) Compensation can serve as the catalyst for increased performance from employees. These observations, combined with research presented in Table 3.4, provide sound footing in recommending that the Department of Defense pursue performance-based compensation for military service members.

F. COMPREHENSIVE REVIEW OF CIVILIAN COMPENSATION PLANS

Regardless of employee environment, specific type of work, or particular sector of employment, components of remuneration must always be addressed. These components can be directly or indirectly effected by the compensation package presented by the employer. The areas of concern are: recruitment and hiring practices, turnover, motivating workers to higher levels of productivity, work-life considerations, evaluations, benefits, authority, and respective tasks of employees.

A more important trend in civilian firms is the idea of employee empowerment. Employee empowerment is strengthening a worker's beliefs in his or her sense of effectiveness. In essence, then, empowerment is not simply a set of external actions; it is a process of changing the internal beliefs of workers. (Conger and Kanungo, 1988, p.45) Worker empowerment has great potential benefits, but it also has its costs. The key to realizing benefits of worker empowerment is to incorporate it into an existing compensation system. According to Lazear, there are three main outcomes of worker empowerment; first, the enhancement of communication between management and workers, second, the power of workers to use information and influence the way information is used, and third, the magnification of creativity and an established environment of innovation. The more difficult task is aligning these functions of empowerment to the compensation system of the firm. The information covered in this chapter shows how civilian firms are attempting to accomplish just that. (Lazear, 1999, p.521)

G. CHAPTER SUMMARY

This chapter provides a general overview of civilian compensation, its form and function. It discusses many of the reasons and explanations why a private firm's compensation exists in its current form. This chapter discusses concepts relating to direct and indirect compensation techniques. These techniques include basic building blocks of private-sector compensation, such as wages, salary, base-pay allowances, current bonuses, and incentive pays. Also an explanation and discussion of the civilian sector's retirement compensation packages is presented. Last, a comprehensive presentation of current research supporting the positive relationship between pay and performance in the civilian sector is presented and discussed. The next chapter provides a discussion on the similarities and differences between military and civilian sector compensation practices.

IV. THE BRIDGE BETWEEN CIVILIAN AND MILITARY COMPENSATION

Fundamentally, the biggest challenge in the Department of Defense today is ensuring that the Department changes with the changing world.

-Hon. William Perry, Secretary of Defense (1996)

A. INTRODUCTION

This chapter explores the differences and similarities between military and civilian pay. The goal is to discover successful civilian compensation schemes that may be applied to the military in order to improve compensation. Additionally, this chapter provides two successful civilian compensation models that offer new approaches to analyzing military compensation. This chapter provides an organized approach to understanding the differences between military and civilian sector compensation by looking at seven general areas:

- A review of military and civilian compensation equity issues.
- A comparison of military and civilian wage growth.
- An analysis of historical military pay adjustments.
- A discussion of whether the military is a calling, a profession, or an occupation.
- An analysis and presentation of market and institutional approaches to compensation and organizational strategy.
- A review of military recruiting and retention issues.
- A presentation of two general civilian compensation strategy models.

When discussing military compensation, the key question is: "How and how much should military personnel be paid?" One answer would be: "About the same as their appropriate counterparts in the civilian sector." (Ruehlin, 2000, p.19) This answer implies that civilian-sector jobs are similar to military jobs; however, there are profound differences between the two. The main difference is that members of the armed services

are legally liable for armed combat. Despite the facts that some military members work in trades or occupational specialties found in the civilian sector, and that some civilian jobs can be dangerous or even life-threatening, all military members either directly participate in or support armed combat. The fact that military basic pay rates are equal for each rank and longevity step recognizes this situation; service members who are in the same position in the hierarchy are assumed to contribute equally to the same general mission. (DoD, 1991, pp.1-7) In the civilian sector, such egalitarian approaches are not used. However, the military and civilian sectors do use similar compensation fixtures. The emphasis and blending of various fixtures defines the primary differences between military and civilian pay

Table 4.1 lists 13 categories of employee remuneration—monetary and non-monetary—used in both the military and civilian sector. The appropriate mix and priority of these categories varies according to the specific job. The organization's management is responsible for aligning pay structures (categories) with organizational goals and objectives. This chapter provides a short discussion of some of these 13 items and their presence in the military and civilian sector.

Table 4.1. Components of a Total Reward System

Type	Examples and Explanation
Compensation	Wages, commissions, and bonuses
Benefits	Vacations, health insurance, and retirement
Social interaction	Friendly and professional workplace. Sub-cultural differences. Existence of particular social norms or mores
Security	Stable, consistent position, and rewards
Status/Recognition	Respect and prominence due to work or position
Work variety	Opportunity to experience different things
Workload	Right amount of work (not too much, not too little) commensurate with pay
Work importance	Is work valued or respected by society or self?
Authority/Control/Autonomy	Ability to influence others and to control own destiny
Advancement	Chance to get ahead
Feedback	Receive information helping to improve performance. Performance evaluation
Work conditions	Hazard free and safe or hazardous and risky
Development Opportunity	Formal and informal training to learn new knowledge, skills, and abilities

Source: Milkovich and Newman, 1999, p. 280

B. COMPARING MILITARY AND CIVILIAN WAGE GROWTH

According to *Military Compensation Background Papers*, the concept of fairness is of primary concern in comparing military and civilian compensation. Some experts believe that, for the military's compensation system to work, military members must feel fairly treated. (Heneman, 1991, p.56) This belief does not carry over as strongly into the civilian sector, where equity among employees within the same firm is not considered as important.[28] Both civilian and military members also think that a sense of fairness should

[28] This belief might be grounded in closed pay systems. The military's pay system is open; that is, all members may receive information on the compensation of all other members of the military. Civilian firms, for the most part, view compensation as a private matter.

exist between military and civilian pay levels. Congress traditionally uses an index to gauge relative wage growth of military and civilian compensation, known as the Employment Cost Index (ECI). By using ECI, Congress created a concept termed "military/civilian pay gap," or pay gap, which defines the level of differences between military and civilian pay as a function of their respective growths. RAND has introduced another index—the Defense Employment Cost Index (DECI)—which it thinks provides a better measure of the pay gap. These two indexes attempt to provide a means to determine equity between military and civilian compensation growth.

1. Employment Cost Index

The pay gap is defined as a percentage difference between military and civilian wage growth over time. The index that Congress currently uses to measure civilian and military pay, the Employment Cost Index (ECI), is a fixed-base weight index that measures the cost of a given "bundle" of civilian and military labor at a fixed point in time. ECI's critics are quick to point out that the index uses only basic pay for military computations. For the civilian sector, Congress forms the ECI from U.S. census data, representing approximately 90 percent of the civilian labor force and is updated annually. (7^{th} QRMC, 1992, p.111) Congress selected ECI in the 1990 Federal Employees Pay Comparability Act (FEPCA) because it articulates a relationship between federal employee and private sector wage growth and was the only researched index at the time.

2. Defense Employment Cost Index

Previous studies by RAND and the Quadrennial Review of Military Compensation (QRMC) have recommended another measure of civilian and military pay growth called the Defense Employment Cost Index (DECI). DECI is a variable-based weighted index[29] that changes proportionally from year to year, with respective changes in active-duty and civilian personnel wages. DECI is derived from data sets, including

[29] As opposed to the ECI's fixed-base weight index.

demographics, maintained by the Defense Manpower Data Center (DMDC) on current and past service members. The DECI formula is based upon each year's active-duty personnel population as compared to similar civilian workers. Civilian wage data come from the Current Population Surveys collected by the Bureau of Labor Statistics. Similarities between military and civilian workers go beyond occupational category; they also include characteristics of age, education, gender, and race. (MacDonald, 1998, p.24) The percent change in DECI from year to year indicates what increases in military pay are necessary to keep pace, on average, with similar civilian pay growth. (DoD, 1991, p.437)

It is important to understand the difficulties of comparing military and civilian populations using DECI. Compared to those in the general workforce, military personnel are younger and more male, and are more likely to be high school graduates; therefore, occupation category characteristics will differ. Further, the percentage of minorities in the military is different from that in the civilian workforce, making exact comparisons more difficult. (MacDonald, 1998, p.24) ECI provides only for a comparison between civilian and military general pay levels. No sensitivity to worker demographics, specific job, or skill level is incorporated in ECI. This lack of employee demographics is the principle difference between ECI and DECI.

Until 1988, the DECI pay gap, as explained above, was under 4 percent, while the ECI difference was 13 percent.[30] In 1990, the DECI was approximately 6 percent and has fallen steadily ever since. The pay gap, as measured by the ECI, has been steady at 13 percent for the past six years. Some policy makers agree, as does this author, that DECI more accurately reflects average civilian wage growth and what military personnel might expect to receive if they were civilian workers. However, no significant action has been taken to switch pay gap measurements from ECI to DECI.

Table 4.2 presents current DECI pay gap figures for some military personnel categories. Senior enlisted men have not done as well as junior enlisted men, but both have higher wages than that of their civilian cohort. Compared to their civilian

[30] In both instances, the military was under civilian sector pay growth rates by the provided percentages.

counterparts, women in both enlisted and officer categories fared better, and senior female officers with a college education experienced greater wage growth. (MacDonald, 1998, p.25) Because FEPCA[31] specifically identifies ECI as the index on which to base civil service policy and military pay adjustments, DECI currently has little to no impact on defense manpower policy decisions. (MacDonald, 1998, p.26)

Table 4.2. Summary of the RAND Sponsored DECI Pay Gap by Category Study

GROUP	PAY GAP UNDER DECI*
Junior Enlisted, Male, H.S. only	+7.3 percent
Senior Enlisted, Male, H.S. only	+2.7 percent
Junior Officer, Male, college	-16.1 percent
Senior Officer, Male, college	-10.9 percent
Junior Enlisted, Female, H.S. only	-7.4 percent
Senior Enlisted, Female, H.S. only	-7.2 percent
Junior Officer, Female, college	-20 percent
Senior Officer, Female, college	-23.4 percent

Source: MacDonald, 1998, adapted from Hosek, J.R. et al, *Military Pay Gaps and Caps*, RAND, 1994.
*The pay gap for ECI pertaining to all groups is –13 percent.

Some critics argue that the pay gap is a myth and that service members are paid substantially more then their civilian counterparts. They also stress that "lobbyists have pushed a 'bogus' pay gap for so long that it has been accepted as fact by politicians, journalists, and military personnel alike." (MacDonald, 1998, p.29) They regard ECI as an ineffective measurement because basic pay, while the bulk of military pay, constitutes only a part of the total military compensation package. Critics also identify longevity pay raises, medical and dental care, commissary and exchange privileges, and retirement

[31] In 1990, the Office of Personnel Management implemented the Federal Employees Pay Comparability Act (FEPCA), which was designed to address recruiting and retention problems of white-collar employees in the Federal government. It applies primarily to employees in the "General Schedule." This pay flexibility is intended to assist with a particular individual in solving a recruitment, relocation, or retention problem.

benefits as a portion of military compensation not considered in ECI wage growth comparisons. Finally, ECI comparisons between military and civilian wage growth ignore periodic pay bonuses, special payments, and leave benefits that are commonplace in military service. (MacDonald, 1998, p.29)

Some experts in the Department of Defense and many economists believe that computing a numerical pay gap serves no useful purpose.[32] They believe a pay gap is defined by current retention and accession rates. They also think that if retention problems exist, then pay is too low, and that if retention and recruiting are faring well, then no pay gap exists. Their approach to pay growth analysis has merit, even in light of existing numerical pay gaps measured by ECI or DECI.

C. MILITARY/CIVILIAN EQUITY COMPENSATION ISSUES

1. Comparing Military and Civilian Pay

Differences between military and private-sector pay levels, calculated with ECI, are inaccurate. ECI formulations include only a portion of military compensation and exclude bonuses, special pay, incentives, or entitlement allowances such as BAS and BHA. Another problem is that not all military personnel receive these additional payments. Therefore, one way to improve the accuracy of the ECI is to do away with special compensation payments to military members. (MacDonald, 1998, p.113) An approach like this may be equivalent to "cutting off your nose to spite your face."

Providing bonuses and incentive payments has become a more popular tool in today's military. The primary reason for this trend is to improve retention by ensuring that certain skilled personnel in the military receive pay comparable to their civilian counterparts. However, providing special bonuses to certain personnel erodes the historical foundations of military compensation—i.e., rewarding longevity instead of job

[32] Based upon interviews with compensation experts working in the Department of Defense who wish to remain anonymous.

skills or performance. Not surprisingly, the use of bonuses and special pay has resulted in long-term retention problems in some occupation groups where individuals do not receive S&I pay and, subsequently, think their talents are not appreciated or rewarded.

If policy makers think that military compensation based more on job description, occupational grouping, or technical expertise is less costly and provides more stability than the current system based on time-in-service and rank, then current military pay requires re-engineering. (MacDonald, 1998, p.113) Otherwise, the current compensation system requires a renewed focus on those principles on which it was founded—equity among members of similar rank and longevity with an egalitarian flair.

2. Reducing Bonus and Incentive Compensation

A logical change to the current military compensation system might be to decrease the dollars applied to bonuses, special payments, incentives, and allowances, and to increase basic pay commensurately for all active-duty members. The economic rents of such an action are potentially large; however, if the current system of bonuses and incentives were reduced or eliminated, the resources to fund increases in basic pay would become available. A simple shift of this type might not provide the dramatic difference that most would expect. Special bonuses and incentives make up a mere 10 percent of total military compensation outlays.

Based on current figures provided by the Department of the Navy Biennial Budget Estimates, basic pay could be increased by more than 10 percent by eliminating the current system of bonuses and incentives and using those resources to fund the increases. (8^{th} QRMC, 1997, p.89) However, leaders and politicians are reluctant to do this because it would result in higher costs for military retirement under current guidelines. It is further argued that detrimental influences on retention would result because service members currently receiving bonuses, special pays, or incentives might choose to leave the service. (MacDonald, 1998, p.114)

Increased pay for those not previously receiving additional compensation would push them toward greater retention. The same members would remain in the military as

long as compensation is comparable to, or better than, what is provided elsewhere. In fact, raises in basic pay might be more beneficial for service members because they would increase future retirement benefits. Regardless, if compensation is not comparable to or better than civilian wages, military members will be more likely to look for employment elsewhere.

3. Long-term Effects

Items discussed up to now have ignored long-term effects of various compensation choices. A longer view of the effects of inequality between military and civilian compensation will now be presented.

a. Diminishing Value of Basic Pay

Senge's paradigm of organizations can be applied to military pay systems. Senge states that a principle characteristic within any large bureaucratic system is that the system grows healthy for a period, but then encounters problems requiring organizational change. This is particularly relevant to the growth of incentives and bonuses in the military compensation system.

> Many systems get locked in a runaway vicious spiral where every actor has to run faster and faster to stay in the same place. Still, others lure individual actors into doing what seems correct, yet eventually causes suffering for all. (Senge, 1990, p.17)

Once a simple system to retain and recruit a small faction of skilled and quality personnel, bonuses and incentives are now used to lure more than half of the active-duty force. (8th QRMC, 1997, p.89) The military is using a short-term solution for a long-term problem and, as a result, failing. As reactive corrections to compensation are used more and more, long-term, corrective measures are used less and are eventually replaced. Possibly, the short lengths of service within our political offices and top command billets lend themselves to "fixing problems with short-term solutions; however,

if problems persists, it's someone else's work at a later time." (Krulak, 1999, p.34) Over time, mechanisms of the initial solution may atrophy or become disabled or even used less, leading to greater reliance on another symptomatic solution. (MacDonald, 1998, p.115) The unintended consequences of what may seem a positive solution in the short term can be negative in the long term. The increased use of bonuses and special pay may be indicative of Senge's paradigm occurring in the military.

What we see more of today is policy makers relying on bonuses rather than basic pay to attract and retain personnel. Evidence of this can be seen in FY 1998 Navy Budget Estimates that include more provisions for enlisted bonuses to attract high-quality personnel who might otherwise find greater financial rewards in the civilian sector. (MacDonald, 1998, p.116) Further, budget estimates contend that the selective reenlistment bonus remains the most cost-effective method of retaining top-notch, technically trained personnel in critically manned billets. (8^{th} QRMC, 1997, p.34) Many of these billets, including nuclear propulsion occupations, medical technician specialists, advanced small computer repair specialists, and foreign language experts, are also in demand in the civilian sector. Policy makers assert that adequate reenlistment incentives are required to counter the potential loss of talent and expertise. (MacDonald, 1998, p.115) This influence is so profound that the military has even coined the phrase "war for talent," articulating a growing concern and desire for intellectual property.

Clearly, the military has emphasized bonuses and incentives to improve recruiting and retention. Though this may have been successful to some degree, it presents risk to the basic structure of military compensation. It is important to state here that this may not be a bad trend, but one that requires awareness. One must be aware that short-term solutions to the challenges of retention and recruiting may lead to long-term dissolution of basic pay, which also serves as a retention and recruiting tool. (MacDonald, 1998, p.116) Although bonuses and incentives appear to be low cost tools for meeting retention goals, their long-term success is offset by the loss of personnel due to the diminishing value of basic pay. (MacDonald, 1998, p.116)

b. Long-term Inequality Effects Among Occupational Ratings

Although bonuses and incentives in one rating or occupation assist in maintaining specific retention levels, they also provide unintended consequences, such as hindering other ratings because those members perceive inequality. In the current military compensation system, bonuses and incentives given to select personnel weakens compensation for work performed, hours worked, level of responsibility, and fairness to all others. In fact, it results in a system where it is possible for lower-ranking individuals with less general experience to earn more than their seniors, counter to historical military compensation goals. It's logical to think that policy makers would consider bonuses appropriate rewards for achievements such as high productivity or performance. However, today, bonuses serve only as an incentive to remain on active duty. Bonuses also serve to undermine incentives provided by basic pay as the core compensation vehicle in the military, making civilian employment all the more attractive. (MacDonald, 1998, p.117)

4. Cost of Closing the Pay Gap

During the 108th Congress, extended discussions on closing the pay gap were introduced. Depending on political party, source of information, and opinions on military readiness, Congress presented a spectrum of recommendations. Most estimates were based on a plan to close the gap, perceived or otherwise, with a five-year defense plan totaling $31 billion. The operating forces of the military aired numerous complaints about military compensation during visits with Secretary of Defense Cohen. He acted upon those complaints and pushed for a significant increase in military compensation during FY 1999 and 2000, as well as specific skill bonuses. Whether these increases will quell complaints, time will tell; in the short term, "rumblings" have subsided. Regardless of vocal complaints and anecdotal evidence, the proof of success will be in recruiting and retention goals being met or exceeded in the future. It will take a long time to see if these

inputs will have the desired results. In the meantime, performance of individual members and units will be summarily neglected as a fixture of military compensation.

D. ANNUAL PAY ADJUSTMENT

Keeping military pay attractive, relative to civilian pay, has long been the intent of Congress. (MacDonald, 1998, p.27) The Defense Authorization Act of 1967 was intended to "ensure that uniformed service personnel will, in the future, be given pay increases comparable to civilian contemporaries." (MacDonald, 1998, p.27) Although individuals decide whether to begin or continue a military career based on several variables, pay seems to be very important. In most cases, poor military recruiting and retention indicate a need for acute pay adjustments. Unfortunately, this is a reactionary approach to problem solving and one that leadership, both internal and external to the military, think satisfactory.

Waiting for signals of crisis prior to making adjustments to compensation can be detrimental. Recruiting new personnel and retraining current personnel to replace the loss of capable military members is inefficient. The problem is one of forecasting when periods of compensation adjustments are required. Identifying the signs of impending problems with recruiting and retention is something that has never been successfully accomplished.

In the decade leading up to 1992, the armed forces had remarkable success in maintaining a high-quality force. Conversely, only six years later (1998), the armed forces were again experiencing problems in recruiting and retention. Solving these unforeseeable events is challenging, and the only solution to date has been a reactionary and incremental adjustment to military pay. Incrementalism, in a reactionary mode, has been the *modus operandi* for challenges of military force management. This technique, by most accounts, is no way to manage a military force or any organization. (Asch and Warner, 1991, p.78)

When comparing military and civilian pay, certain benefits are inevitably left out. (MacDonald, 1998, p.30) Some propose that a better measure of the difference between

military and civilian compensation might be civilian equivalency rates. The Navy Working Capital Fund currently uses civilian equivalency rates to reimburse the Navy and Marine Corps for the price of military personnel working in private or semi-private activities (an accounting technique). The rate is derived from all costs required to compensate active-duty personnel in Navy Working Capital Fund activities; these costs include base pay, allowances, special pay, bonuses and incentives, health care, and any other benefits deemed appropriate and "reimbursable." The rates are consistent with RMC (see Chapter II). Table 4.3, derived from MacDonald, shows budgeted civilian equivalency rates for FY 1998. It also reflects budgeted values for FY 1998 and 1999. FY 2000 and 2001 budget years incorporate revised actual data with appropriate budgeted pay inflation. (MacDonald, 1998, p.29)

Table 4.3. Civilian Equivalency Rates Budgeted FY 1998 and 1999 and Forecasted for FY 2000 and 2001 in Dollars

Pay Grade	FY 1998	FY 1999	FY 2000	FY 2001
O-8	144,765	149,625	154,156	158,781
O-6	106,632	110,239	113,580	116,988
O-4	76,702	79,310	81,712	84,163
O-1	44,481	45,994	47,386	48,808
E-9	40,269	41,641	42,903	44,190
E-7	32,721	33,834	34,857	35,903
E-5	29,358	30,352	31,275	32,213
E-3	23,377	24,166	24,899	25,646
E-1	19,048	19,696	20,293	20,902

Source: Adapted from MacDonald, 1998.

Some studies provide solid evidence that a pay gap exists.[33] However, determining the exact value of the gap and in what specific categories or communities it exists is challenging. Some critics have concluded that there is no pay gap, citing references from past military pay raises and showing that service members should have been better off then their civilian counterparts. Others believe civilian equivalency rates provide the best measure of comparison between military and civilian wage levels. However, using civilian equivalency rates would be inaccurate because these measures are based on what individual members cost each command instead of what each member receives in payment from each command. Civilian equivalency rates use such items as training, travel, and moving costs, and, therefore, do not represent actual dollars paid for work performed. (MacDonald, 1998, p.112) Therefore, civilian equivalency rates should not be used to compare military and civilian salaries. Careful study of military/civilian equity issues in wage growth reveals that past trends in military compensation have begun to erode the value of basic pay. The erosion has resulted in a persistent problem of the pay gap between military and civilian compensation. (MacDonald, 1998, p.112)

As explained by a prominent expert in military compensation, what has developed in the military compensation system is similar to the United States Tax Code,[34] which is nothing more than a "patchwork" of short-term solutions to problems of the day. These short-term solutions have become permanent fixtures to the military pay system. One remedy for military compensation challenges is similar to that for improving the tax code—moving military compensation toward a more simple structure.

E. CALLING, PROFESSION, OR OCCUPATION

Shortly after the advent of the AVF, Charles Moskos presented his conclusions about whether military service mirrors the characteristics of a calling, a profession, or an occupation. Moskos's analysis included historical reconstruction, trend specification,

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[33] Refer to Asch and Warner, 1991; Hosek, 1992; and Heneman, 1995.

[34] Derived from interviews conducted with DoD Compensation Branch employees.

and, most effectively, a model of the future state of military affairs. (Moskos, 1978, p.2) His hypothesis—and subsequent conclusion—was that the AVF is causing military work to more and more resemble an occupation.

To Moskos, a calling is "a purpose transcending individual self-interest in favor of a presumed higher good." A profession is "legitimated in terms of specialized expertise such as skill level formally accredited after long, intensive, academic training." However, an occupation is "legitimated in terms of the marketplace such as prevailing monetary rewards for equivalent competencies." (Moskos, 1978, p.3) Certainly, Moskos's definition of an occupation most closely resembles the concept of a "job" in the general civilian sector.

Moskos makes his point with five principle indicators:

> (1) the significant pay increases given the armed forces since 1971 in an effort to make military compensation competitive with civilian rates; (2) the use of government panels to establish a military salary system with the goal of making civilian and military remuneration comparable; (3) proposals to eliminate or reduce a host of military non-pecuniary benefits such as health care for dependents; (4) the separation of work and residence; and (5) the high rate of first-term attrition for military members.[35] (Moskos, 1978, p.4)

His arguments, combined with a lengthy discussion on trends in the military, forcing its compliance and sensitivity to marketplace forces, makes Moskos's statements difficult to refute. That the military has shifted from operating in an environment of conscription to a new equilibrium of "occupational characteristics" is clear. However, the military has not modified its basic compensation system to be consistent with this new view of military work.

The following section presents a discussion of two approaches to organizational strategy—market and institutional approaches.

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[35] First-term attrition rates in the military have stayed approximately 30 percent since the advent of the AVF.

F. MARKET OR INSTITUTIONAL APPROACH

Two concepts have historically dominated discussions of military compensation: "market" and "institutional" approaches and how they relate to compensation policy. Historically, the military has been dominated by an institutional approach. However, since implementation of the AVF in 1973, the military has relied primarily upon a competitive labor market to obtain its military personnel—i.e., the market approach. (Harris, 1994, p.35) The concept of pay within a market environment has resulted in what we have today, a complex system of remuneration and incentives in the military. Some experts in military sociology, such as Moskos, argue on behalf of the institutional approach, finding serious problems in the methods and techniques used in a marketplace environment. Proponents of each approach provide persuasive arguments for their respective positions. (Harris, 1994, p.35) The next section explores both approaches.

1. Market Approach

The market approach, also known as occupation or economic method, is based on mechanisms of supply and demand in the labor market and is used primarily by economists. Warner, a noted expert in military labor economics, identifies four distinguishing characteristics of the market approach: efficiency, response to incentives, consumer preferences, and current value of compensation. (Warner, 1983, p.23)

Most economists believe that a fundamental goal of any compensation system is to obtain the correct mix of personnel at the lowest possible cost. Therefore, a compensation system should aim to obtain the required number of personnel in each specific occupation at the lowest cost. In order to hire personnel at the lowest cost, an organization must recognize the separate labor supply and demand curves and related elasticities of different occupations. Therefore, the market approach would argue against across-the-board pay raises, which overcompensate some occupations while under-compensating others. Although economists see across-the-board pay raises as inefficient and expensive in economic terms, the majority of military pay raises are made this way.

Warner identified economic characteristics that are applicable in labor market discussions. However, labor economists recognize that labor markets can be more complicated than traditional economic markets that operate exclusively on supply and demand—and these complications are compounded when considering the military's internal labor market.

According to Harris, one of the earliest examples of a market approach to compensation in the military is enlistment bonuses, also known as "bounties." The origins of enlistment bonuses can be traced back to 1791 during the earliest efforts to raise the nation's armed forces. The first bounties were institutional in nature, as they were paid to all recruits who enlisted. Much later, during the Civil War, unsavory individuals perfected the art of "bounty jumping." Men would receive their bounty, or enlistment bonus, from a certain state and then desert, only to obtain another bounty from another state. These actions led to the temporary termination of enlistment bonuses during the Civil War. (Harris, 1994, p.43)

The market approach allows for specific targeting of military personnel needs and the development of compensation systems to address those needs. Also, the market approach places high value on current, rather than deferred, cash compensation initiatives. (Harris, 1994, p.54)

Major advantages of the market approach become disadvantages when considered in the context of internal labor markets.[36] While the market approach relies on the forces of labor supply and demand to establish appropriate wage rates, an internal labor market attempts to remove the competitive nature of standard labor markets.[37] As Harris explains, maintenance of S&I pay for enlistment and reenlistment in critical occupational fields makes a market-driven compensation program difficult to manage. In addition, developing and maintaining individual pay charts (a prescription for military occupation

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[36] Refer to discussion of internal labor markets in Chapter II.

[37] This effect is not true concerning military entry points. The military must compete directly with the civilian labor market for recruits and officer candidates.

field management) for each specific military occupation introduces a greater complexity to the system. (Harris, 1994, p.55)

The last point is that market approaches do not consider military organizational requirements for the shared responsibility for defense of a nation. Instead, it concentrates solely on each individual's job skills. Admittedly, the shared responsibility and hardship prevalent throughout the armed services build camaraderie and teamwork. The market approach of separate pay scales for separate members of the same grade might adversely affect the armed forces by creating morale issues through "appearances" of inequity. (Harris, 1994, p.56) Anecdotally, these factors are already witnessed in units consisting of both aviators (essentially under a different pay scale) and non-aviators in the military.

2. Institutional Approach

According to Harris, the institutional approach is based upon the concept "that members of an institution are motivated primarily by a sense of identity within an organization." (Harris, 1994, p.35) Moskos defines institutionalism as:

> [in] terms of values and norms . . . a purpose transcending individual self-interest in favor of a higher good. Members [of the military] . . . are often seen as following a calling . . . as being different or apart from the broader society. . . . (Moskos, 1978, p.31)

Supporters of institutional approaches believe that military members of the AVF should, and do in fact, feel a separation from broader society and possess a special "calling." Instead of being paid wages merely to perform a job, they serve to benefit the institution and other "higher" social interests. Their commitment is grounded in institutional values of "duty, honor, and country;" and military service is a "way of life," not just a "job" or "occupation." (8^{th} QRMC, 1997, p.6)

Under an institutional approach, compensation is not the result of individual expertise entirely, but, rather, a direct function of seniority, rank, and need. (Harris, 1994, p.36) The "need" component is an important factor in institutional approaches, where

those in need receive more. (Moskos, 1978, p.32) Binkin points out that close to 50 percent of total military earnings are based on factors other than job performance. These other factors include marital status, availability of government facilities, and deferred income. (Binkin, 1975, p.37)

The military places high value on the welfare of its members and has developed a compensation system described as "paternalistic." This system, as most institutionalists agree, argues that all service members have the same national security defense responsibilities and, as such, should be on a relatively equal footing. Service occupational specialties may vary from member to member, but final expectations of the nation and its leaders are essentially the same for all service members—winning wars. (Harris, 1994, p.37)

As Harris goes on to explain, the paternalistic and need-oriented concept have led to, among other benefits, subsidized shopping on military installations, survivor benefits, and deferred compensation through retirement benefits. (Harris, 1994, p.38) Providing subsidized services for what is generally not furnished in the civilian sector creates a major inefficiency for the military. However, the institutional approach prefers to provide such services for the welfare of military members and their families, regardless of efficiency issues.

Moreover, institutionalists think that military compensation systems enhance the relationship between the organization and the service member, but do not create the relationship. Under this approach, members are determined to attain goals, increase morale, and obtain unit cohesion by their own internal motivation, while compensation merely serves to buttress an already sturdy commitment. Because loss of three principle components—commitment, morale, and cohesion—can lead to failure, or at least diminished effectiveness, in combat, institutionalists believe that factors other than compensation—most notably, leadership—have a stronger influence. Institutionalists think they have the correct formula for success in the military environment. (Harris, 1994, p.40) This formula, however, makes compensation a fixture instead of a catalyst.

3. Comparison of Institutional and Market Approaches

Table 4.4 summarizes the philosophical differences between the institutional and market approaches to military compensation.

Table 4.4. A Summary and Comparison of Institutional and Market Approaches to Military Compensation

Category	Institutional Approach	Market Approach
Philosophy	Equal pay for equal responsibility	Equal pay for equal work
Pay purposes	Enhanced relationship between individual and organization	Obtain best force at lowest possible cost
Framework	Intangibles such as: cohesion, honor, and commitment	Labor supply and demand
Pay	Paternalistic; deferred income and in-kind payments	Individualistic; current income and personal preference
Allowances	Based upon service member's needs	Based upon equality of pay and work
Employment basis	Member's role is to defend the nation	Member's role is skill based
Pay adjustments	Uniformly applied to all service members	Applied only to critical occupations

Source: Harris, 1994.

4. Some Interim Conclusions

One can draw some interim conclusions about the two approaches to military compensation. The following conclusions take into account similarities and differences between military and civilian compensation schemes. They are based, in part, on Harris's research and his formulation of lessons learned since the advent of the AVF.

a. Equitability of the Compensation System

Equitability is an important aspect of military compensation, especially in light of its institutional precepts. Because the military blends many individual divergent philosophies, an equitable compensation system for all participants has been an important achievement. If military members had seen the system as grossly unfair, the AVF might not have enjoyed the relative success it has during the past 30 years. However, a tide change may be occurring. Equitability in today's military force disregards the individualistic nature of the civilian workforce, possibly making the military's compensation system less competitive with the civilian sector's.

b. Efficiency, Flexibility, and use of Bonuses

Enlistment and selective reenlistment bonuses are methods the military uses to fill critical billets. By applying a pure market approach to its compensation system, the military will be able to target, attract, and retain specific personnel and meet qualitative and quantitative needs. (Harris, 1994, p.58) However, the military has neglected the use of bonuses (a market approach) to motivate individual performance or productivity.

c. Special and Incentive Compensation for Force Management

Special and incentive compensation is an important component of force management. Because more than 40 percent of military personnel receive at least one type of S&I payment, the importance of S&I to military compensation cannot be overlooked. If the armed service could use only basic pay to attract an active-duty military force, the pay would have to be high enough to attract the 40 percent that receive special pay. Setting the base pay levels that high might result in overpaying the remaining 60 percent of the force that would have enlisted at the lower rates. In short, S&I tools provide a lower overall manpower cost by avoiding economic rents and

targeting specific occupations for retention. (Harris, 1994, p.58) However, this economic advantage is negated by the inequitability it creates.

d. Special and Incentive Compensation updating

S&I payments, as explained earlier, must be evaluated and appropriately adjusted regularly. Historically, this has not occurred as often as it should. Incentive payments have remained unchanged, on average, from six to ten years, and then been adjusted up to 180 percent in some instances. (Harris, 1994, p.59) An important organization that exists solely to analyze, review, and study military compensation is the Quadrennial Review of Military Compensation (QRMC). QRMC meets every four years, with a published report normally appearing during the fifth year. The private sector moves much faster than the QRMC and is more responsive to its employees. One recommendation that may allow military compensation to adjust faster is mandating reviews of military compensation every other year or annually instead of quadrennially.

e. Institution and Market Practices' Vitality

Approaches to military compensation, institutional and market, are required to ensure a viable force in the future. Each approach has strengths and weaknesses, as discussed in this chapter. The current system of compensation is not perfect, but it has successfully blended major advantages of each approach into one comprehensive package that has been historically well received and utilized. In this light, it has remained somewhat competitive with civilian remuneration methods. However, the past cannot serve as a perfect indicator of the future.

f. Internal Labor Market and Traditional Institutional Strategies

The closed manpower system of the military resembles what economists call an internal labor market. The internal labor market has several key features that are consistent with institutional philosophies. The following features all point toward institutionalism in the military: encouraging career considerations; emphasizing the

present value of career earnings over initial wage rates; and requiring the payment of wages comparable with competing employment sources over a member's career. Maintaining an awareness of these important relationships is critical in understanding the concepts of institutionalism and internal labor markets.

G. RECRUITING AND RETENTION ISSUES

Since the perceived mission of military compensation is retaining and recruiting quality personnel, this chapter will devote some time to this topic. However, an important point to recall is that these factors are also important in the civilian sector, with additional emphasis on productivity and individual/team performance.

1. Enlisted Men/Women

It is estimated that the Navy will miss its recruiting goal by 7,000 personnel in FY 2000. The Navy is not alone. Both the Army and Air Force are forecasting missed recruiting goals also. Apparently, the lower recruiting numbers have been forecasted for the past four years. Vice Admiral Barbara McGann (now Director of Personnel and Reserve Affairs for the Department of Defense), who headed the Navy's recruiting force in 1998, stressed that "young people are more apt to choose and attend college over a military enlistment." Other reasons for not choosing the military include: "young people today do not see the military as a viable option to begin one's work life;" "young people today are not influenced by adults who may have served in the military because fewer and fewer of those adults exist in today's population;" and, finally, "potential recruits do not want to commit to a four- or six-year term of service required of most occupational fields or terms of enlistment." (MacDonald, 1998, p.123) These comments by Vice Admiral McGann sum up the DoD's recent observations and excuses for poor recruiting. The fact that she made these comments in 1997, well before the poor recruiting began speaks to the lack of proactive efforts of the military.

Another area deemed important in influencing recruiting is the perceived effect of compensation and benefits. While data, to date, do not provide sound evidence of the

effect, some senior military leaders, such as General Shelton, Chairman of the Joint Chiefs of Staff, believe there is sufficient anecdotal evidence that compensation negatively effects both recruiting goals and retention. (MacDonald, 1998, p.123)

Additionally, recognition serves an important role in motivating employees to exert effort. As military awards (such as medals and certificates) evolve into long-term incentives, the loss of short-term incentives becomes a growing problem. Pay for performance can fill the void of little or no short-term recognition tools in the military. The military's highest leaders have not discussed the reduction of short-term recognition tools. This thesis argues that the time has come.

2. Officers

Retention of military officers is of growing concern, even with recruiting goals being met for the "short term." Junior military officer populations seem satisfactory; however, once the transition from O-3 to O-4 occurs, the same statement cannot be made. A recent solution to this problem in the Navy has been the creation of a Surface Warfare Officer bonus of $50,000 payable over three years. Though leaders insist that there is no retention problem with officers, this may be a preventative effort. To ease retention problems and prevent further decreases in morale, the order of the day is increased compensation. Most initiatives and recommendations are to increase compensation for those groups expecting to have the greatest attrition. Obviously, increased pay does chip away at the problem and provide an interim solution. Also, the economy, unemployment rates, and related success of civilian firms play a role in causing the problem. When the civilian sector seems to have a more generous compensation program and system, then it makes sense that officers who have no "vesting" incentive simply leave. Other novel approaches to the problem are afoot. The Under Secretary of the Navy, Jerry MacArthur Hultin, recently commissioned a "30-Something Group"[38] of Naval Officers to define

[38] The "30 Something Group" consisted of 19 Officers of both the Navy and Marine Corps who met from 18 Jan 00 to 11 Feb 00 at the Naval Postgraduate School. Their mandate was to provide a description of the Navy Service they would like to serve in today and in the year 2020.

what they see as major problems of the Navy and Marine Corps. Lack of performance-based compensation was one of the items on their list, but other factors were equally important—namely fun, the feeling of teamwork, and validation of positive effort toward making the nation and world a better and safer place to live.

3. Recent Trends Affecting Retention Decisions

Because the military has traditionally based its compensation measures of effectiveness on recruiting and retention rates, it is important to understand them. This section provides a discussion of individual and organizational decisions affecting recruitment and retention.

a. Quality of Life, Compensation, and Military Life

The demographics of today's service members are different from those of past members. One cannot help but analyze these differences—or at least acknowledge that a different population is serving under the exact same pay system that existed generations before. More than 50 percent of service members on active duty in 2000 are married, and 70 percent of those families have a spouse that works. Twenty years ago, the figures were 25 percent and 60 percent, respectively. With families come increased financial burdens and responsibilities. Further, in the era of the AVF, there is increased competition between the military and civilian sector for quality personnel—the "war for talent" is being fought. Therefore, retention of high-quality personnel can be directly related to service members' perception, and the civilian world's perspective, of military quality of life. The military lifestyle can create unique financial burdens that do not exist in the civilian sector: frequent moves, separation of family and community, fluctuation in pay depending on specific duty at hand, and retirement concerns, to name a few. (Wardynski, 1997, p.4) Reportedly, financial problems are a leading cause of personal stress and family dysfunction across all military branches; ironically, most military people think these problems do not exist in the civilian sector, and many opt for that choice.

b. Wage Penalty

A study by Dr. Casey Wardynski in 1997 found that, over the course of a military career, the spouses of military members incur a wage penalty of 13 to 34 percent. (Wardynski, 1997, p.16) This difference is attributed primarily to frequent moves, which prevent military spouses from receiving benefits associated with working for a single employer for a long time. Lost benefits also include little or no vesting in the non-military spouse's retirement programs, no longevity pay raises, and the lack of other benefits ranging from health care to company vehicles. Wardynski's study included over 32,000 civilian spouses of military personnel compared to over 750,000 employees not married to military personnel. (Wardynski, 1997, p.45) The study also considered the "wage penalty" a contributing reason for protecting current military retirement benefits as deferred compensation for military families. (MacDonald, 1997, p.125)

c. Vesting

Chapter II of this thesis presented the idea of graduated vesting for members serving fewer than 20 years through a thrift saving plan (TSP) or similar scheme. A review of current military leadership thinking is that a TSP would not provide the services with proper flexibility to manage its force; nor would its members positively receive it. In short, they conclude that vesting before the 20-year mark of service would negatively impact recruiting and, more importantly, retention of well-educated and trained enlisted and officer personnel. Their reasoning: the TSP serves as an incentive for getting out prior to 20-year vesting. (DFAS, 2000, p.7)

4. Retirement as a Retention Tool

Recent trends in recruiting and retention, competition from the private sector, and issues outlined in Chapters II and III offer evidence that current military compensation requires re-engineering. Radical redesigns of military compensation and historical lessons learned from military pay should be incorporated. Increasing retirement benefits

through a thrift savings plan or 401(k) type savings scheme allows individual vesting prior to 20 years of service and may assist in closing the pay gap.

Although there are different proposals regarding the type of defined contribution plans, one fact remains. The economic success and popularity of optional retirement investment plans during the past decade, as well as the benefits they may provide individuals in uniform, are potentially great. (MacDonald, 1998, p.126) Evidence suggests that recent trends in private sector retirement plans have placed greater emphasis on defined contribution plans. Further, policy makers are providing additional tax advantages and incentives to those employees who participate in these same plans. (MacDonald, 1998, p.128)

It is foreseeable, then, that future laws will continue to provide incentives for individuals to save for retirement through defined contribution saving plans. It is also foreseeable that earnings in these defined plans will have greater impact on the economy as baby boomers reach retirement age and the future of social security is in doubt. Currently, military retirement benefits are regarded as superior and more generous than traditional civilian savings plans; the past is no perfect indication of the future. According to some, the future returns provided by defined contribution savings plans may outperform the current military retirement benefit and provide a much more stable security plan with greater value than current military benefits.

5. Civilian Style Plans Undermine Military Retirement Justification

Critics of adopting private-style, contribution-based retirement plans for the military claim that such systems undermine military retirement justification. However, they fail to acknowledge that military retirement is justified by how individuals serving on active duty view it. They also ignore individuals' views on whether they are better off in the future with a private sector retirement scheme or with the military retirement plan. (MacDonald, 1998, p.127)

The proposed thrift savings plan for military members might be one incentive for military members to stay for a full career. However, the proposed system with no

matching funds would not be nearly as generous as the current military retirement program, which demands neither member contribution nor matching funds on the part of the government. The compensation structure and retirement system for the military is geared toward retaining personnel and competing directly with civilian compensation schemes. If these pay plans do not compete readily with civilian plans, then their existence will undermine the very retention goal they are attempting to achieve. In this light, civilian trends toward generous contribution techniques and pay for performance may undermine current military retirement justification

H. COMPENSATION STRATEGY MODELS

All organizations that pay employees should pursue a compensation strategy. An in-depth review of military compensation, conducted in concert with this thesis, determined that the military has not clearly articulated a formal vision or statement of military compensation strategy. Anecdotally, the military measures the success of its compensation system solely on goals of retention and recruiting. However, the compensation systems it operates allow neither for timely discovery nor expeditious application of solutions to these two primary goals. This section provides two models that, when applied to the military compensation system, might prove beneficial.

Further, the military has not used traditional theories that focus on the process through which people are motivated in the workplace. Four process-related theories have been traditionally used to explain how reward systems can motivate worker behavior, and each has significant implications for designers of compensation systems. [39] (Risher and Fay, 1997, p.207)

[39] The four main theories are equity theory, expectancy theory, goalsetting theory, and reinforcement theory. For a detailed discussion of each, refer to Risher and Fay, 1997, p.208.

1. Formulation of a Compensation Strategy

Milkovich and Newman presented the first model, which provides groundwork for an organization to pursue an effective compensation strategy; this thesis argues that this same model can be utilized by the U.S. military. They state that developing a compensation strategy involves four steps, as presented in Figure 4.1. These steps establish what should be fundamental goals of all compensation systems. This model has worked for civilian firms and may provide improvements to military compensation.

The four steps reveal to the organization what it most desires and prizes in terms of behavior and purpose from its employees. The steps might seem obvious, but taken in their entirety, they provide insight into the military compensation system. The steps are: 1) assess total compensation implications of cultural values, global competitive pressures, employee needs, and organization strategy; 2) fit compensation decisions with the organization strategy and environmental context; 3) design a compensation system which translates strategy into practice; and, most important, 4) reassess the fit.

Where military compensation schemes continually fail is in steps 2 and 4. When fitting policy decisions to strategic goals, the military is woefully inept at ensuring competitiveness between its compensation system and that of the civilian sector. A lag effect occurs in the military's compensation adjustments, with changes in the structure taking place only when a crisis, perceived or otherwise, happens.

Figure 4.1 presents a model for addressing military compensation issues in a proactive rather than reactionary manner. The Quadrennial Review of Military Compensation assesses military compensation every four years, but its recommendations have historically provided only incremental recommendations. In light of revolutionary changes in the nation's economy, commensurate changes need to occur in military compensation practices. The first step toward more flexibility in military pay is to perform more reviews of military compensation. QRMC serves as a suitable change agent for military compensation and should be allowed to do its job more often than every four years.

Step 4 of Figure 4.1 provides the impetus for change in the military compensation system. As the model indicates, a realignment of military compensation conditions is required due to profound changes in conditions in the external labor market. Certainly, in terms of retention and recruiting, a continual look at compensation levels is required. However, a reevaluation of the administration of military compensation is also required. This reevaluation allows for strategic change and is required in order to maintain a viable force that, by most accounts, will be smaller and geared more to technological advances in the future. More and more military theorists believe that a "revolution in military affairs (RMA)" and a "strategic inflection point" are occurring in the military. (Krulak, 1997, pp.30-36) This means that old theories pertaining to fighting wars and the very purpose of the military are being redefined and reevaluated. Military compensation should be a part of these ongoing efforts.

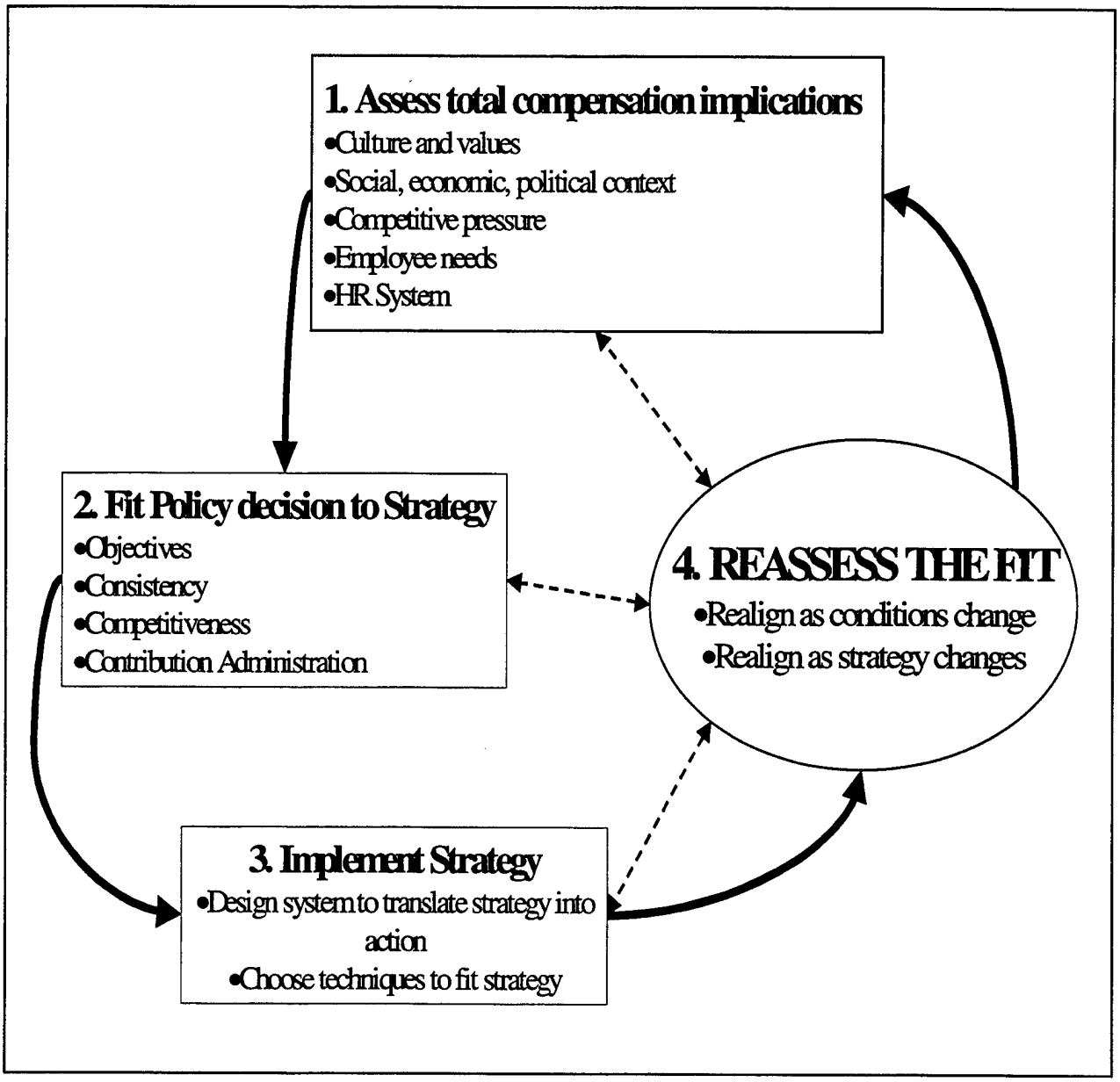

Figure 4.1. Key Steps to Formulate a Total Compensation Strategy

2. A General Pay Model

Milkovich and Newman present a second model that can assist in determining better military compensation techniques. The model is derived from Milkovich's and Newman's comprehensive studies of civilian sector compensation. As Moskos states, if the military institution is, in fact, evolving into an occupation, then models that facilitate and construct a civilian firm's compensation strategy may prove beneficial to the military. Figure 4.2 presents a strategic plan to accomplish that end.

The pay model presented as Figure 4.2 contains three basic building blocks of compensation: 1) the strategic policies that form the foundation of the compensation system; 2) the techniques of compensation; and 3) the objectives of the compensation system. (Milkovich and Newman, 1999, p.11)

The information derived from Figure 4.2 offers a number of lessons learned in the civilian sector—for example, ensuring that a compensation system is synchronized and interrelated with the performance evaluation and promotion system. This critical linkage is challenging to achieve, and the military has approached it only indirectly in the past. In the military, linkages between pay, evaluation, and promotion are indirectly related; but the relationships should be direct. The challenge of ensuring a direct linkage while still maintaining goals of efficiency, equity, and compliance come under the banner of the organization's strategic objectives.

Where the military can learn the most from civilian compensation structures is in their focus on three general areas: consistency, competitiveness, and contributors. Work analysis under the consistency arrow is most important.

The military suffers from what some term the "psychology of conscription." Historically, manpower in the military has not been considered a scarce resource. During times of conscription, one could solve work problems by utilizing the apparently cheapest resource available, people. However, in today's military, this option has been greatly reduced, forcing the military to focus anew on analyzing the kind of work that requires completion and the number, type, and rank of those who accomplish it. The military

needs to focus on improving worker performance and quality of workmanship, while also controlling labor costs. As in the civilian sector, the military must address policy decisions reflected on the left side of the pay model. These policies form the building blocks upon which pay systems are constructed and serve as guidelines for managing pay in ways that accomplish the organization's objectives.

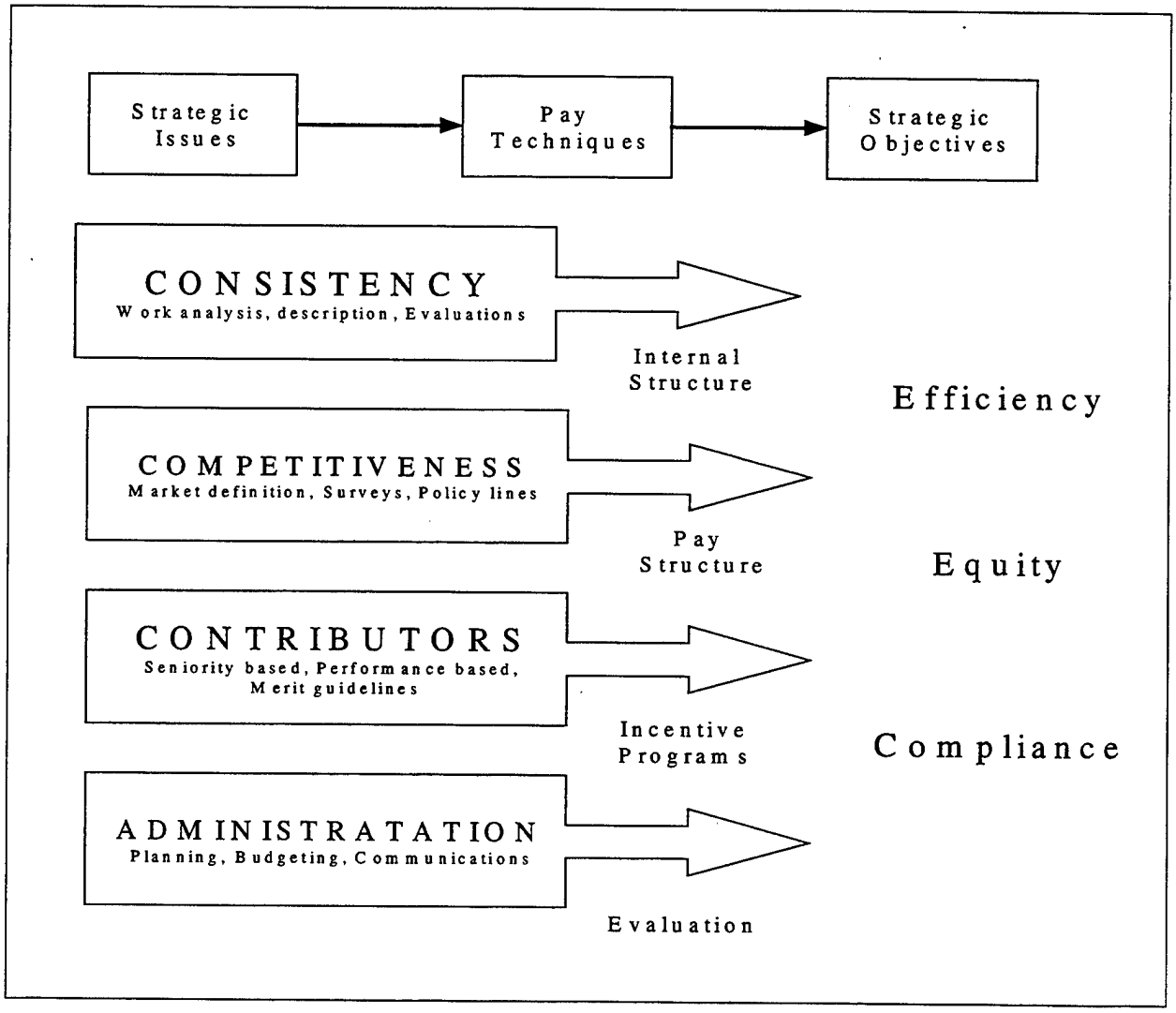

Figure 4.2. A General Pay Model

I. CHAPTER SUMMARY

This chapter provides a discussion of the similarities and differences between civilian and military compensation. The chapter also discusses the pay gap, its history, and possible remedies for the disproportionate wage growth rates between military and civilian pay. A lengthy discussion and explanation of "market" and "institutional" approaches to military compensation is presented, along with reasons why components from both approaches exist in today's military. Further, the chapter examines trends witnessed by a noted expert in military sociology and presents two models to approach military compensation based on his conclusions. Finally, this chapter presents information deemed most important when comparing military compensation to civilian remuneration methods. The relationship is important because civilian sector compensation, as a whole, is the principle element affecting the military's success in recruiting and retaining talented personnel.

Seven conclusions and recommendations were formed in this chapter. They are summarized below:

1. DECI provides the best measure of civilian/military wage growth difference. By categorizing both civilian and military occupational characteristics and demographics and basing comparisons as appropriate, a more accurate measurement is resulted. DECI should replace ECI when pay gap policy decisions are made.

2. Military basic pay is diminishing in value and importance due to increased reliance upon bonuses and special pay.

3. Military pay adjustments are slower than civilian sector adjustments. Reasons for this vary, but primarily due to military crisis management and QRMC actions occurring quadrennially, the military lags civilian pay modifications.

4. The military establishment, since the advent of the AVF, is moving closer to being classified an occupation instead of a calling or profession. Approaches to defense manpower policy formulation should incorporate the fact that service members view the military as an occupation.

5. When discussing the military's propensity to approach manpower policy decisions with either an institutional or market approach, a market approach is more appropriate.

6. The military lacks a formal compensation strategy. Models presented by Milkovich and Newman provide frameworks to approach the creation of a DoD compensation strategy. Further, Milkovich and Newman provide another model that provides a framework for conducting maintenance to an existing compensation system. Both models should be used by DoD in solving compensation challenges.

7. The benefits provided by pay for performance is neglected by the U.S. military. The time has come to entertain seriously the idea of implementing pay for performance in the military.[40] The next chapter discusses this recommendation further.

Table 4.4 provides an analysis of the military reward systems and civilian sector practices. Understanding these aspects of military pay, as they relate to civilian pay, provides groundwork for Chapter V.

[40] A more detailed discussion of this recommendation appears in chapter III.

Table 4.5. Analysis of Current Military Reward System as Compared to Civilian Sector Practices

Current Reward System Element	Comparison to Civilian Sector	Long-held Assumptions Reinforced by Current Military Rewards
BASE PAY (Salary)		
Many grades/Ranks	Fewer grade levels but greater emphasis on "banding"	Hierarchy is critical; rank is important; service members develop vertically
Flat pay graduation (ratio of bottom to top of the pay system)	Much flatter than in private sector	Internal equity and ethic of selfless service are important
PROGRESSION THROUGH PAY SYSTEM (Career movement)		
Seniority/time-in-grade is important factor	More emphasis than in private sector	Internal equality is important
Up or out system	Used in some forms	Merit and competition are critically important
Short careers are common	Atypical of private sector	Youth matters in war
Frequent change in assignment	Few private sector firms are comparable	Service identity is more important than unity identity; breadth of experience is important
PAY-FOR-PERFORMANCE		
Promotion, not pay, is the major perceived individual performance reward	Merit pay is far more typical of private sector	Selfless service and internal equity are more important than pay; therefore, deemphasis on pay for performance
NON-MONETARY RECOGNITION FOR PERFORMANCE		
Very extensive use for individuals and units	Far more than in private sector	Celebrating performance reinforces pride and ethos of selfless service; variable pay strikes at egalitarianism ethos
BENEFITS		
High value relative to base pay	Far less than is typical in private sector	Extensive security alleviates family concerns during extended absences; offsets burdens/exigencies of military service

Source: 8th QRMC, 1997, p.21

V. PERFORMANCE-BASED COMPENSATION IN THE MILITARY

Marines should be paid for performing instead of just coming to work. If you pay people for longevity, they just hang around.[41]

SgtMaj Alford L. McMichael, USMC
14th SgtMaj of the U.S. Marine Corps

A. INTRODUCTION

Designing effective military compensation structures has been actively debated over the years. Most military pay analysis has been conducted to ensure a stable and robust military population, focusing narrowly on the relationship between compensation and personnel retention. Analysts have paid less attention to whether current military compensation systems induce the best individuals to stay motivated, seek career advancement, and perform their individual jobs to the best of their abilities. Some may believe that military members, protecting freedom, are satisfied with their patriotic and benevolent duties, regardless of compensation scheme. However, in the age of the AVF, other factors may influence employee motivation.

At issue in this thesis is a military system of pay anchored to principles of institutionalism and paternalism. Instead of paying workers according to their individual contributions, the military continues to use a compensation system as old as the military itself. That is, it tailors compensation to a force of unskilled personnel serving as seamen and foot soldiers. Under the current system, rank is thought to serve as a reliable gauge of contribution. Even in the twenty-first century, as technological developments demand an industrialized military force calling for a greater percent of highly trained technicians, specialists, and craftsmen, this arrangement has been taken for granted. This was understandable as long as conscription shielded the military from the environment of

[41] As quoted from *Leatherneck*, March 2000, p.19.

free-market forces. Regardless, the need to assess the military pay system, which is the principle determinant of the price of military manpower, is pressing.

The military has rarely compensated directly for job performance. Certainly, an individual who performs well over time will be promoted and survive job tournaments. However, short-term assurances of high job performance are not secured with current military compensation schemes. Therefore, an individual who sees himself as "unpromotable" may lose the incentive to perform well or even to an average degree. Further, an individual who sees himself as "promotable" may not perform up to the his potential and may sink into mediocrity by performing only those tasks "minimally required."

In the context of enhanced military job performance, conventional pay programs are part of the problem; after all, they were not conceived of as a tool to facilitate and enhance individual performance or manage worker behavior. The static and bureaucratic nature of the military, which includes its compensation schemes, make reorganization difficult and time-consuming. However, it is completely fallacious to argue that government pay programs represent a total human management system (Risher and Fay, 1997, p.14). One way to improve military compensation is to review civilian compensation successes and incorporate them into military compensation structures. One principal improvement to military pay would be to align it more toward a management system that incorporates more than retention and recruiting efforts. Thus, the military should seriously consider the recommendation to incorporate pay for performance into its compensation system, or at least commission data generating experiments to allow for further analysis.

B. TRADITIONAL INCENTIVES

Compensation incentives have been with the military for some time. Historically, the first incentive pays adopted were intended to provide enlistment and reenlistment enticements. Other incentive pays were established to compensate members exposed to conditions more hazardous than those experienced by the average service member during

peacetime. (DoD, 1991, p.147) The majority of S&I pay serves these two purposes and also provides additional incentives for people to enter specific career fields or maintain current occupational specialties. For the most part, the transition from a force based on conscription to an all-volunteer force resulted in a similar transition for military compensation—i.e., to serve as a mechanism for balancing labor supply and demand. (DoD, 1991, p.147)

Over time, the military pay chart has undergone fundamental shifts in pay distribution and levels. The U.S. Congress and military leadership instigated these shifts in an attempt to solve short-term retention problems. Details pertaining to these shifts and to an emphasis upon performance-based incentives in the military are presented below.

1. Pre-World War II Era (1760-1930)

Performance incentives during the era of WWI and earlier were limited. Up to and including the 1920s, incentive compensation focused mainly on recruiting. Earlier payments, created in 1914, included aviation pay and much earlier, in 1835, the use of career sea-duty pay. Compensation during this era was based primarily on equity among all service members. Compensation was similar for all members because the military's primary mission was ultimately similar for all military personnel (protection of the country and fighting its wars). Although this mission has not changed, its emphasis in human resource management techniques has diminished in modern times.

2. World War II Era (1931-1949)

Military compensation experienced few fundamental changes during the WWII era, but did experience more changes than in previous eras. Additional compensation, as witnessed during the WWI era, was issued for specific duties that were considered more dangerous or less desirable. War, amplifying the conviction of equity among its participants (a fatal bullet doesn't concern itself with its victim's skills or rank), prolonged the idea of egalitarianism among service members. The protracted use of

conscription also advanced the influence of equity between military members. The primary duty of fighting and winning America's wars was considered, by most people, the sole duty at hand. Therefore, any differences in individual compensation rested more upon rank and longevity and not on specific job duties, skills, or occupational specialties.

3. Post-World War II Era (1950-1965)

Three principal pay types were created during this period: hostile-fire pay, hazardous-duty pay, and combat-incentive pay. Hostile-fire pay incentives provided additional payment for specific personnel during periods of nominal peace, but when they were subject to hostile fire or explosions of hostile mines (the Korean conflict is an example). (DoD, 1991, p.151) Personnel who were at risk of physical harm or imminent danger while serving in foreign areas, subject to additional threats due to civil insurrection, civil war, terrorism, or warlike conditions, received hostile-fire pay. (DoD, 1991, p.151) The fundamental argument for this type of compensation was as follows:

> In July 1950, the Army recommended legislation to provide "hazardous Duty Pay" to personnel involved in combat. In support of their proposal, the Army argued that it was inequitable that combat personnel were not eligible for additional pay when other personnel assigned to flying, submarine, parachute, and other hazardous duties were receiving extra compensation. (DoD, 1991, p.151)

As combat incentive pay was born, so was its effect upon further modifications to military pay as a whole. The military reviewed all duties considered dangerous, and some subsequently qualified for additional compensation. Occupations involving demolition duty, diving, nuclear qualifications, experimental stress, chemical exposure, and leprosy duty were all given additional pay (hazardous-duty pay) based upon danger and inherent risks in the specific assigned duty. The idea of equality for all members participating in the accomplishment of a shared mission was waning.

4. Modern Era (1966-Present)

Military compensation underwent another transition during the post-Vietnam era. Although the military maintained compensation fixtures from the preceding eras, it provided additional incentives for members and prospective members. Emphasis shifted from traditional equity-based payments toward monetary incentives for recruiting and retention. The services granted special pay to health professionals, engineers, scientific career professionals, and foreign language proficiency personnel, and provided overseas-duty incentives as well. Enlistment and reenlistment bonuses also enjoyed a renewed vibrancy during this period. The military used other payments, such as selective reenlistment bonuses, education assistance payments, and reserve officers pay, to recruit and retain quality personnel. As discussed earlier, these payments were determined more by factors of labor supply and demand and rested on an entirely different set of preconceived notions (individualism instead of egalitarianism) of military service.

With the advent of AVF, the paradigm shifted toward the use of monetary incentives that continues to this day. More recently, the concepts behind civilian compensation have gained momentum in the military. The realization that incentives work makes their use compelling and difficult to disregard. Further, if used properly, incentives can lead to profound positive effects within an organization.

C. CURRENT INCENTIVES

The U.S. military has understood the power of incentives for some time. However, the application of these incentives is rarely, at least in the short-term, geared toward the performance of duty or job productivity. Although short-term incentives do exist in the military, they are based upon non-pecuniary factors or negative reinforcement. During conscription, one could be legally charged for poor performance. Although rarely put into action, a charge of "malingering" could be imposed upon an individual for not performing up to standards or exhibiting a poor work ethic. Further, people not performing up to standards or exhibiting poor work habits could be assigned duties such

as "painting rocks" or "kitchen police details." Poor-performing individuals were allowed to remain on active duty (in the short term) and still draw payment, a development that has not changed in the modern military. Also, during the pre-AVF period, manpower was considered less of a scarce resource. Poor performers were expendable due to the large number of personnel in the military.

The advent of the AVF, however, has compelled the military to place a premium on its personnel—in other words, manpower is now widely recognized as a scarce resource. Unfortunately, the modern military still approaches its dealings with poor performers in a framework of conscription. Regardless, some time-tested means of motivation are still used.

1. Awards and Accolades

Awards have been an important part of military culture from its very beginning. Napoleon Bonaparte is reported to have said, "It is amazing what a man will do for a small piece of ribbon."[42] Despite their obvious differences, Napoleon's army had one striking similarity to the U.S. military prior to the AVF—the use of conscription. Under conscription, the essence of military service was housed in equity: All members served the same general purpose under similar conditions. Specific job skills were not as important as the mission or task at hand. As such, payment and compensation were less important than the higher purpose of the nation's defense or dominance of the battlefield in the name of sovereignty or freedom. Therefore, during this time, rewards for good performance appear in the form of non-pecuniary elements such as awards, medals, and accolades. Essentially, military awards, such as medals, were synonymous with what is currently thought of as rewards. Further, non-pecuniary rewards were presented for relatively short-term achievements such as bravery during a specific battle. Today's military environment requires more than these historical rewards for service and an important distinction between long- and short-term recognition is also important.

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[42] Attributed to *Brassey's Encyclopedia of Military History and Biography.*

Unfortunately, medals in today's military fall under the long-term recognition category. Military medals and certificates, by some accounts, still serve as a short-term acknowledgment of high performance, but the vast majority are classified as long-term rewards. An example of this is what is known as the "end-of-tour medal."[43] In the modern military, promotions are said to be the result of high performance; the truth is that longevity is a stronger influence. Promotion and medal presentation have both evolved into elements of time-in-service instead of payoffs for high performance. The case of medals, now being presented for longevity, leaves a significant void in military human resource management—the lack of short-term tools for employee recognition. In the twenty-first century, medals have lost their historical short-term form of recognition and, now, represent stepping stones similar to time-in-service. With this transformation, payments and compensation have become a better form of work incentive in the military. However, the impact of compensation—also linked to longevity—is lessened by its long-term nature, further aggravating the misaligned nature of military compensation systems and its supposed effect on performance.

2. Promotion

Under the military's current system, a reward for sustained positive performance and general acceptable behavior is reportedly found in promotions. However, as presented earlier in this thesis, promotion during the initial 15 years of service seems to be a function of longevity rather than performance. Regardless, anecdotal evidence shows that these rewards are spread so far apart in time that any connection between the reward (promotion) and the behavior leading to its delivery have little relation. The behavior that is rewarded is simply sticking around and staying out of trouble. This is less true as one progresses to more senior grades in both the enlisted and officer ranks. One's performance greatly affects the chances for promotion to O-6 and E-8 and above.

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[43] The "end-of-tour medal" has become the norm in today's military. Personnel normally expect a medal after completing a three-year tour of duty with a specific command. The medal's presentation normally rests more upon staying out of trouble instead of specific performance of duty.

Unfortunately, the process of achieving these ranks is extremely long, over 20 years. Therefore, the percentage of those who serve on active duty, driven to perform well, will not realize their payoff until much later in their careers, if at all.

Creating a stronger tie between performance and compensation in the military, increases in performance may result. Table 3.4 in Chapter III contains results from research on civilian firms that use pay for performance. The results are compelling, and should provide a rationale for transforming at least a portion of military compensation to a pay-for-performance scheme.

3. On-the-Spot "Back Patting"

By far the cheapest, and by some accounts the most influential performance-igniting factor, is simple work recognition. Feedback and recognition, as well as good performance, can motivate. (Risher and Fay, 1997, p.209) Numerous studies and psychology-based explorations into enhanced job performance reveal an incredibly strong connection between job recognition and performance. Bosses who continually notice and comment favorably on good performance reinforce their employees' positive performance. Consistent with reinforcement theory, "back patting," certificates, and mentions in corporate newsletters, further the positive behavior desired by managers and executives.

This thesis argues that compensation also can lead to positive performance. As a way of acknowledging positive behavior, compensation serves reinforcement theory predictions and also uses expectancy theory, as explained in chapter III, resulting in enhanced worker performance. In this way, compensation becomes a potential tool for improving the performance of military members.

D. TRADITIONAL PERFORMANCE MEASURES

Performance in the military has been exceedingly difficult to measure throughout military history. In a general sense, superior performance in the military is defined by winning battles and wars. This measure applies more to the abilities of a team or unit

than it does to individual performance, and has more to do with 'ends" than with the 'means.' It assumes that all members of a victorious team or unit performed well. The ends justify whatever means were used to win the combative competition. Further, the measure of performance is relative to the enemy. That is, it would be premature to conclude that a force is performing well based on one combat victory, for the next adversary may provide a very different outcome. During peacetime, the measures become much hazier and seem to metamorphose into something different for every individual, unit, or team. This is where the challenge of measuring performance and productivity in the military has always existed. Conventional wisdom has been that defining military performance is impossible, and an easy solution is not obtainable. Two general areas provide a starting point for evaluating individual military productivity.

1. Warrior Skills

Warrior skills take the form of personal weapon proficiency, knowledge of branch of service missions, and force structure, combined with knowledge of specific military branch levels of strategic, operational, and tactical operations. Other skills may include personal fitness standards and appearance, education level, swim qualification, or gas mask utilization proficiency. The point is that all members of a specific branch of service within DoD require certain generic skills, and these skills should be identified and directly linked to compensation. In addition to general warrior skills, each job also carries a number of its own particular skills and related proficiency levels. Other attributes such as team performance, unit performance, or service branch performance can be included in compensation packages, creating a multidimensional remuneration system. The percentage of individual compensation dealing with basic pay, individual performance, or team performance depends on the factors that each branch—and/or the DoD—consider the most important.

The issue of fairness in compensation will more than likely continue to exist even with a transformation toward performance-based pay. If performance-related compensation is to become a fixture of military compensation, one cannot disregard the

influences of equity that may still exist in the military culture. Cultural transformation takes time. Thus, switching to a performance- or productivity-focused system will require some sensitivity to equity, and a consistent "measuring stick" placed on all members would likely be required. The measuring stick gauges individual abilities and personal characteristics desired most by the military.

2. Battlefield Measures

In addition to warrior skills, another area open for direct linkage to compensation is battlefield performance. In short, if the primary function of a military force is to fight and win America's battles, compensation might be directly linked to battlefield victory. Arguably, many more variables affect individual behavior in battle besides compensation. Research shows that "protecting your buddy," love of country, and fear of death are the most influential. (English, 1981, pp.217-119) However, anecdotal evidence presents a different picture of more recent military operations.

During the past ten years, the vast majority of military operations have shifted from traditional battlefield environments to that of operations other than war (OOTW). During interviews, senior compensation specialists in DoD discussed the importance of remuneration in OOTW operations. The increased use of separation, hazardous-duty, and imminent-danger pay were seen as extremely positive incentives for serving in operational OOTW missions. In fact, volunteers based their desire to serve in OOTW mission areas on the additional compensation and related tax advantages. An important factor in explaining this trend is the significantly reduced probability of death from participating in OOTW operations combined with increased pay.

With anecdotal evidence providing signals that "performance" compensation is more important in today's military operations, it is practically intuitive to make it a more important component of a service member's military experience. Granted, it is difficult to measure the level of influence compensation has upon an individual member's desire to serve in a certain area or participate in a certain mission. However, the fact that additional compensation may lead to increased voluntary participation in OOTW shows

the power of incentives. Using the same logic, basing a portion of compensation on performance during operations may result in positive behavior by personnel.

E. THEORETICAL ISSUES IN MILITARY PAY-FOR-PERFORMANCE*

Pay for performance focuses on ways of increasing the effort that employees put into their work. Rewards from work are considered a benefit to employees, while work itself can be seen as a cost to employers. It is obvious from this formulation that if no rewards are associated with work effort, no effort is likely to be forthcoming. In theory, then, rewarding employees for performance should induce greater effort. This theory is limited, however, in its ability to predict whether it would be worthwhile for an employer to pay for performance. It presents nothing about whether the costs of implementing a pay-for-performance program will be less than the productivity or increased performance gains from the program. This aspect is very important when embarking upon a major structural change in military compensation. Some theoretical problems that occur when determining the benefit and cost of pay for performance are presented below.

1. Moral Hazard

If individual performance is rewarded in such a way that comparisons are made to the performance of other workers, then efforts to sabotage a fellow worker may occur. To decrease a "competitor's productivity becomes a relative increase in productivity for the provocateur." (8th QRMC, 1997, p.27) This problem exists when performance-based wage systems are determined on a relative basis instead of on an absolute performance basis (refer to Chapter II). Moral hazard can hurt an organization that thrives on its ability to form and employ teams to achieve its success.

* Information obtained and presented in this sub-section was derived primarily from the 8th QRMC Working Papers, 1997, pp.26-32.

2. Free Rider

The "free rider" problem exists when group performance rather than individual performance is the basis for rewards. Because an individual member may benefit from the efforts of other team members, the efforts of the individual member are not as directly related to productivity. As such, an individual has no incentive to provide additional effort and will be a "free rider" on the efforts of others. (8th QRMC, 1997, p.27)

3. Risk

People generally prefer certainty over uncertainty when it comes to compensation, yet they would be willing to risk a portion of their pay for potentially increased rewards. If *all* compensation is "at risk," employees may lose motivation because they perceive that they may lose pay due to circumstances beyond their control. (8th QRMC, 1997, p.27) Conversely, if no portion of an individual's compensation is at risk, there is no reason to put forth maximum effort. The issue of risk raises a question about the percentage of individual compensation that should be based on performance vs. basic pay.

4. Principal-Agent

A source of inefficiency[44] in the way firms operate occurs because those making decisions (agents) have different goals than those affected by the decision (principals). (Risher and Fay, 1979, p.347) The interests of employers are not necessarily the same as those of employees. Therefore, compensation must do more than give employees an incentive to perform. The compensation system must also ensure that the effort supports the organization's goals. In theory, if workers have information that employers do not have, then it may be possible for workers to supervise themselves more efficiently. (8th QRMC, 1997, p.29) Also, by building a compensation system that takes into account principal-agent issues, inefficiencies can be rooted out or diminished.

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[44] Efficiency is obtaining the most possible satisfaction from a given amount of resources. (Risher and Fay, 1979, p.369)

F. CURRENT PERFORMANCE MEASURES

Choosing correct performance criteria on which to base a compensation system is extremely important. When choosing the best performance criteria, three objectives should be kept in mind. First, individuals must have some control over the performance that is being assessed. Holding individuals responsible for something they cannot control is unfair and defeats the purpose of a performance-related compensation scheme. Second, performance must be verifiable. "In general, the less easily verifiable the actual performance attainment is, the more human judgement involved in the observation, recording, and evaluation of performance exists, and the greater the potential for uncertainty and conflict arises." (OECD, 1993, p.26) And third, performance criteria must have a positive relationship with organizational performance and goals. This establishes a link between individual performance and favorable influence on the goals and objectives of the organization. A linkage between individual, team, and organization is achieved through the strategic compensation plan.

G. LINKING INCENTIVES AND COMPENSATION

In the private sector, merit pay policies are widespread. Heneman reports on a series of surveys showing that more than 80 percent of private-sector employers use merit pay plans. A 1995 American Compensation Association salary budget survey of 3,667 organizations found that more than 83 percent of respondents had merit-pay programs for their nonexempt employees, and more than 87 percent had them for exempt employees. Because respondents included some municipal hospitals, colleges and universities, government units, and nonprofit organizations, the figures understate the prevalence of merit pay in the private sector.

Beginning with schemes introduced in the United States Federal Government during 1979 for Senior Executive Service (SES) employees and in 1981 for mid-level managers, there has been significant growth in the adoption of performance-pay schemes by public sector organizations. (OECD, 1993, p.15) Across many countries and different

political entities, performance pay in the public sector is seen as a reform that is expected to lead to improved efficiency and effectiveness. (OECD, 1993, p.15)

The widespread support by public sector managers for performance pay may, in itself, indicate a shift toward a performance-focused culture. Performance-related compensation may represent a major shift away from traditional longevity-based reward systems for public sector employees. Different countries have identified different policy objectives for the introduction of performance-related pay. The fundamental assumption is that compensation is a form of incentive already in existence in most organizations. However, according to the Organization for Economic Co-Operation and Development (OECD), there are several common themes in the objectives. These themes are as follows:

- To create greater accountability for individual performance and strengthen the belief that rewards are linked to performance.
- To further strengthen the relationship between individual job goals and organizational goals.
- To provide agencies (military) and individuals (service members) with greater flexibility to recognize and reward individual performance contributions.
- To contain salary costs by reducing the incidence of automatic progression through salary levels.
- To enhance job satisfaction and the belief that rewards are fairly distributed.
- To reduce turnover among high-quality public sector employees who are being recruited to higher-paying jobs in the private sector.

One of the requirements for an effective performance pay scheme is that the award differentials between high performers and low performers be sufficient to define the difference between high performance and low. Certainly, a fine line exists between pay schemes based on equity and on performance, but there is no reason that the two cannot

mix. Table 3.4 provides evidence enough that compensation is a form of incentive that numerous employers have used to their advantage.

H. LINKING INCENTIVES AND PERFORMANCE

The question is: does the promise of a bonus really make employees work harder or better? The answer, says David Guest, a human resource expert at London University's Birkbeck College, is:

> . . . only if you line up several parts of the package, and not just pay. The fear is not that incentive pay doesn't work, but that it works so well that [organizations] have to be careful about the incentives they create. Incentive pay should be the very last thing you do, once you have gotten your strategy right and understand your [duties.] (Cairncross, 1999, p.3)

It is easy to get even simple incentives wrong—as when AT&T paid computer programmers by the number of lines of code they produced or when British life insurers rewarded agents for the number of pensions they sold, whether they were suitable for the buyer or not. (Cairncross, 1999, p.3)

In fact, most studies on the impact of incentives on performance have looked at simple tasks. One, by Edward Lazear of Stanford University Business School, found that workers installing car windscreens increased their productivity when they were put on piece rates rather than fixed wages. A study of British jockeys suggested they were more likely to win if they were paid out of prize money than if they were kept on retainer. A review of farm workers in the Philippines found that those on piece rates lost more weight at work than those on fixed pay, presumably because they expended more effort (but they also made more money and could afford to buy more food). None of this, though, is apparently helping with the complexities that exist in large bureaucratic organizations. (Cairncross, 1999, p.2)

I. LINKING COMPENSATION AND PERFORMANCE

Undoubtedly, the most important trend in civilian compensation management is the movement away from policies and practices that contribute to an entitlement culture

and higher fixed payroll costs. "Corporations are now placing more emphasis on merit pay and rapidly introducing group incentive plans. Many of these organizations are in a trial-and-error mode, trying ideas and working to strengthen existing plans." (Risher and Fay, 1997, p.179)

Research on the effects of pay for performance is based primarily upon private-sector experience and focuses on the impact of compensation schemes on performance (OECD, 1993, p.21). Studies presented in Chapter III, Table 3.4, on the effects of public sector schemes are limited, but do provide suitable evidence to at least pursue further research into the application of pay for performance in the military.

Studies of individual incentive plans in private sector environments have shown that improvements in performance can be as high as 30 percent over plans that do not incorporate incentives. (OECD, 1993, p.21) However, studies also show that unintended consequences can evolve with such plans. Some possible unintended consequences are neglect of certain job aspects not covered explicitly in the incentive plan, reporting of invalid data on performance from effected employees, and negative social sanctions placed upon high performers from the low or average performers within the same firm. For the most part, research shows that such performance-based compensation plans work best when the concerned employees have relatively simple, structured jobs and when performance goals can be quantified and are relatively unambiguous. (Milkovich and Newman, 1999, pp.82-3)

Other performance management systems, such as goal setting and timely feedback, have been found to have significant impact on individual and group performance. Based on evidence for individual performance, this two-part incentive-based system of goal setting with timely feedback bodes well for many organizations. Based on evidence for individual performance, a performance system that incorporates both goal setting and feedback with performance incentives appears to offer the greatest potential for productivity improvements. (Gilroy et al., 1991, p.69) Problems may arise, however, when performance appraisals are more subjective or when there is an inability

to link pay mechanically to performance in a way that clearly bases the incentive to the performance. (OECD, 1993, p.23)

1. Navy Demonstration Project

The U.S. Navy demonstration project is the longest-running project in performance-based compensation studies to date. It was introduced in 1980 to coincide with the implementation of the Civil Service Reform Act (1979). The timing of the study's introduction allows evaluations to be made against baseline data for 1979, prior to introduction reforms, even to this day. The project, originally planned to run until 1985, has been extended three times and has recently been approved as a permanent fixture in the Navy's civilian compensation plan. It covers 7,600 workers at two Naval Research Laboratories in California, and has instituted changes to position classification, performance appraisals, and compensation. Under the project, performance pay was introduced for all employees at the two demonstration laboratories (two other laboratories did not undergo project changes and served as control groups), with merit increments and bonuses of up to 10 percent of basic salary. Pay allocation decisions are based on specific performance ratings from an appraisal system that uses the goal-setting approach, as discussed earlier. (OECD, 1993, pp.78-81)

The United States Office of Personnel Management (OPM) and the General Accounting Office (GAO) have extensively evaluated the project. The OPM's report on the results after the initial ten-year period, as reported by OECD, show that:

- The perceived link between pay and performance, critical to the effective operation of performance-pay schemes, has been found significant (in the statistical sense) at the two demonstration laboratories but did not change in the control laboratories.

- Support for performance-pay among employees has grown during the life of the project.

- Turnover among high performers is lower at the demonstration laboratories than at the controlled laboratories.

- Average salaries at the demonstration laboratories are about 6 percent higher than at the controlled laboratories.

These results suggest that performance pay based on an objective-setting performance appraisal system can have a positive effect on several of the key policy objectives of performance-pay schemes. Of particular note are the observed effects on the perceived link between pay and performance and on reduced turnover rates among workers. (OECD, 1997, p.79)

2. General Evidence

First, it is important to state what performance-based pay is not. It is neither a quick fix nor a panacea. It is not a static formula—in fact, it demands flexibility. Especially in the short run, it is not a particularly easy way to run an organization. That said, it is also important to point out that this challenging management approach *works*. It works because, by definition, it demands the very best that each individual has to offer. (Hopkins, et al, 1992, p.155)

In general, and according to some research, the relationship that employees perceive between performance and pay provides a measure of the likely effects (and success) of performance-pay schemes. A range of factors can undermine the perceived linkage between pay and performance of an employee. On the performance appraisal side, these include poorly-defined performance criteria, inconsistent and biased performance ratings, and a general lack of discrimination in the ratings. (OECD, 1993, p.72)

Evidence regarding the effects of various schemes on the perceived relationship between pay and performance is limited, but on the whole, encouraging. The most encouraging example is illustrated above in the Navy Demonstration Project at two Navy Research Organizations. The introduction of performance-pay schemes produced a significant improvement in the perceived linkage between pay and performance at the tested sites, but not at the control group sites. The results of the study, as articulated

above, indicate that the individual pay awards based on performance appraisals can strengthen perceived relationships between pay and performance and expected enhancement to individual performance. The vast majority of research concludes that the element of perception is the strongest determinant of a successful pay and promotion system. (OECD, 1993, p.72)

J. CHAPTER CONCLUSION

It would be difficult to prove without a doubt that merit pay contributes to improved performance; no effective basis for determining the impact of such a policy appears to exist. In the private sector the practice is common,[45] and in other sectors a complicated research strategy would be needed to isolate the impact. The evidence is, thus, largely anecdotal. (Risher and Fay, 1997, p.215) This makes it difficult, if not impossible, to empirically isolate the impact of merit pay on military organizational or individual performance. However, the evidence and explanations presented in Chapter III combined with discussions on the linkage between incentives, compensation, and performance testify to the positive relationship between pay and performance.

The ideal compensation strategy is one that energizes and engages employees, focuses them on bettering their performance and the organization's, and possibly links at least part of their pay directly to that performance. Such a strategy might bring a team together as a unit, mobilize its members to increase productivity and improve quality, and encourage them to motivate and manage themselves toward that end—without the destructive competition that often accompanies other forms of merit-based pay. Does this ideal exist? It may, in the form of performance-based compensation. The civilian sector, as demonstrated in Chapter III, appears to be embracing performance-based compensation more and more. The time has come for the military to entertain the idea of pay-for performance as well.

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[45] Refer to Chapter III for discussion of civilian use for pay for performance.

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VI. CONCLUSIONS AND RECOMMENDATIONS

Cash payment is not the sole nexus of man with man.

-Thomas Carlyle, Scottish essayist, historian (1832)

A. SUMMARY

This thesis identifies, classifies, and recommends changes to a military compensation system that is as old as the military itself. It reviews military and civilian compensation and highlights the differences and similarities between military and civilian compensation. The thesis then presents an examination of general compensation schemes and a comparative analysis between military and civilian pay schemes. The thesis then presented its main purpose: to examine how successful trends in civilian compensation might work within the military; namely, pay for performance. A significant successful fixture of civilian compensation that is not part of the military compensation system is pay for performance. The aim here was to make a judgment about the appropriateness of pay for performance to the military compensation system.

Chapters III and V discussed the application of pay for performance in the military. It presented traditional short-term incentive components and how these components have transformed over time. Further, with the advent of generous civilian compensation packages, an unprecedented strong economy, and high quality of life in the civilian sector, the military establishment is positioned to lose the "war for talent." By utilizing civilian trends of gearing compensation more toward performance, the military may provide a more competitive choice for potential employees and lure a quality employee population for future missions.

The military's traditional emphasis on incrementalism and slow evolutionary modifications to compensation will simply not do in the future. The civilian sector's increased velocity of change, combined with a propensity toward quality and reengineering, will leave the military far behind in terms of compensation structures and administration. A new approach to military compensation is required to increase its

competitiveness with the civilian sector. This change, as explored in this thesis, is a new focus toward military pay for performance.

B. LIMITATIONS

A fundamental limitation to the study of military pay for performance is a lack of numerical data. The military has never directly compensated, in monetary terms, for short-term performance of duty. However, the neglect of the military to pursue such actions does not mean that it should not be researched; quite the contrary is true. Currently, the Department of Defense is exploring more pay-for-performance opportunities with its civilian employees. This is seen in a 1999 study concerning defense acquisition employees. The study, starting in January 1999, will extend beyond ten years and provide formal applications of pay for performance within DoD.[46]

The Civilian Defense Acquisition Employee Compensation Reform initiative is truly revolutionary in its application of pay for performance within the military. Actions such as these will provide the required data to overcome fundamental limitations of this study. Although mostly based upon anecdotal evidence, this thesis uses numerous studies linking pay and performance to actual productivity within numerous private firms, as well as some public institutions. Chapter III provides a discussion and presentation of forty civilian pay for promotion studies—all showing a positive relationship between performance and pay. The caveat to comparisons between civilian and military institutions is that they do not accomplish similar missions, use similar tasks, or possess the same organizational structures or culture. However, civilian sector employees are like the military's in some basic and important ways. One similarity is their basic humanity and relationship with incentives and work. The psychology of incentives and the evidence the civilian sector provides (refer Table 3.4) for its successes with pay for performance make a suitable starting place for further research in military applications or incremental implementation.

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[46] The first formal study was presented in Chapter V concerning the "The Navy Demonstration Project."

The last significant limitation to this thesis is the lack of literature and prior research into the primary research question. Because the purpose of military compensation has been recruiting and retention for so long breaking the paradigm is daunting at best. The leading researchers in military compensation have neglected the effect of compensation and its relationship with individual or team performance. The advent of the "war for talent," combined with compelling civilian employment compensation structures, will force the military and its researchers to seek new ways to increase the effectiveness and efficiency of the military workforce and its compensation system.

C. RECOMMENDATIONS

More research concerning pay-for-performance schemes in the military is needed. The degree and amount of pay for performance also requires more research, but the basic mechanism of incentives and their power to affect behavior is confirmed by this thesis, and should not be ignored. A significant portion of civilian compensation is based upon performance-related behaviors and work productivity. Allowing individuals and supervisors to control the size and value of remuneration will have a direct impact upon the efficiency and effectiveness of the military organization. Recent trends toward right sizing the military workforce demands a new focus on increasing the performance and productivity of its remaining members. The increased demands on military service members, combined with reductions in force size, serve as evidence that military compensation requires modification. Modifications geared toward individual and team performance might serve to enhance and improve military readiness and performance.

Setting aside a *portion* of military compensation and basing it solely on individual and team performance may be reasonable and has been successfully used in the civilian sector. The hardest question in determining a suitable pay-for-performance scheme in the military is: what determines a suitable measure of productivity? Experience in the civilian sector, especially in highly diversified firms, shows that an intense focus on individual jobs is required. In the military, this role is already filled by any "boss" who is

responsible for observing and completing performance evaluation reviews, or fitness reports, on subordinates. This individual defines what measures of productivity or effectiveness are, and incorporates these measures, quantitative or qualitative, into daily work regimens. As annual or semiannual performance evaluations are completed, the portion of pay for performance allotments that individual employees will receive may be determined. At issue is a transformation of military compensation system from one of paternalism toward one of individualism emphasizing teamwork.

As some may argue, teamwork and team focus is an important component to successful military service. Therefore, just as a portion of an individual's military compensation may be set aside for individual performance, so the same should be done for team or command performance. The same rules of remuneration used in individual pay-for-performance schemes would apply, but they would be geared more toward the performance of the command. Accomplishment of the mission, as well as individual performance, would become inseparable from performance evaluations, compensation, and promotions. As the military finds itself more at odds with civilian techniques of compensation, so will it find itself at a loss with recruiting and retaining quality personnel. By recognizing the accomplishments of individuals and forming a compensation structure focused more on performance than on longevity, a successful linkage will be formed.

D. IMPLICATIONS

Basing its compensation system on performance and/or team productivity would have many implications for the military. Besides the anticipated enhancements in performance, productivity, and teamwork, some unintended consequences may result. One principle unintended consequence of a switch to performance-based pay (even in an incremental fashion) is the type of individual drawn to the organization. Risk-averse individuals may be less attracted to an organization that bases its compensation on performance.

Another significant implication of pay for performance is its effect on budgeting. Currently, budgeting may be conducted proactively due to accurate forecasts allowed by tried-and-true manpower planning techniques. By shifting to a performance-based compensation system, the ability to forecast compensation levels becomes more difficult. Budgeters simply do not know how individuals will perform or how their bosses will evaluate their performance. This can be somewhat controlled by capping the total purse linked to performance-based pay. However, this approach will force a budget for military compensation to be based more on bracketing or "best or worst case scenario." A flexible approach to budgeting will be required to successfully institute a performance-based compensation plan for the military. It is worth mentioning, however, that a flexible approach toward budgeting is required for many more areas than just military compensation in our present Planning, Programming, Budgeting System (PPBS). Regardless, budgets for performance pay may constrain the success of a performance-based pay schemes. (OECD, 1993, p.61) As experienced in private firms, a general problem is that performance-based pay is vulnerable to budgetary cutbacks in times of economic constraint. This is a critical issue due to the effect levels and availability of funding will have on the impact and success of the compensation plan. As a result, attention is likely to be geared more to the cost of performance-based compensation programs instead of to the benefit it provides. (OECD, 1993, p.62)

E. AREAS FOR FURTHER RESEARCH

In an era of shrinking defense budgets, a strong economy, and increasing demands on military use, military compensation will continue to be important in defining the quantity and quality of active-duty members and those who decide to make a career of the military. As such, and in agreement with McDonald, further studies into the areas of retention, specifically the quality of personnel being retained, would assist efforts to determine if the military compensation system is viable. Studies comparing the quality of personnel remaining in the service with that of those who decide to leave would benefit the military organization in sculpting its compensation system.

Other areas for further study concern the link between performance evaluations, promotions, and the military compensation system. In a time of dwindling ranks, a way to increase the performance of active-duty members would prove worthwhile. While this thesis presents an argument for increasing research into the relationship between compensation and performance evaluations, it does not provide 'hard' data supporting the conclusion. A quantitative study exploring pay for performance in the military may prove extremely beneficial. Another look into the emphasis of short-term versus long-term pay for performance may also prove fruitful, especially with more-flexible retirement plans (namely the thrift savings plan) on the horizon that loosen the 20-year vesting requirement.

Appendix C provides additional recommendations not pertaining specifically to military pay for performance. The Appendix C recommendations, which come from research on the primary and secondary research questions of this thesis, provide other fruitful areas of research and analysis.

Further explorations into pay for performance will provide stimulating discoveries of how man reacts to his environment. Understanding how human behavior can be modified, directed, or coaxed into certain outcomes provides numerous benefits—benefits not only for the individual operating under the policies of pay for performance, but also for the organization and society of which the individual is a member.

APPENDIX A. 1 JANUARY 2000 MILITARY BASIC PAY TABLE (MONTHLY)

Commissioned Officers														
Rank	**<2**	**2**	**3**	**4**	**6**	**8**	**10**	**12**	**14**	**16**	**18**	**20**	**22**	**24**
O-10	8215	8504	8504	8504	8504	8830	8830	9320	9320	9986	9986	10655	10655	10655
O-9	7281	7472	7631	7631	7631	7825	782	8150	8150	8830	8830	9320	9320	9320
O-8	6594	6792	6953	6953	6953	7472	7472	7825	7825	8150	8504	8830	9048	9048
O-7	5480	5852	5852	5852	6115	6115	6469	6469	6792	7472	7985	7985	7985	7985
O-6	4061	4462	4754	4754	4754	4754	4753	4754	4916	5693	5984	6115	6469	6687
O-5	3248	3814	4078	4078	4078	4078	4200	4427	4724	5078	5368	5531	5725	5725
O-4	2738	3334	3556	3556	3622	3782	4040	4268	4462	4658	4786	4786	4786	4786
O-3	2544	2844	3041	3365	3526	3652	3850	4040	4139	4139	4139	4139	4139	4139
O-2	2219	2423	2911	3009	3071	3071	3071	3071	3071	3071	3071	3071	3071	3071
O-1	1926	2005	2423	2423	2423	2423	242	2423	2423	2423	2423	2423	2423	2423

Commissioned Officers with over 4 years active service as enlisted or warrant officer														
O-3E	-	-	-	3364	3526	3652	3850	4040	4200	4200	4200	4200	4200	4200
O-2E	-	-	-	3009	3071	3169	3334	3461	3556	3556	3556	3556	3556	3556
O-1E	-	-	-	2423	2588	2684	2781	2878	3009	3009	3009	3009	3009	3009

Warrant Officers														
W-5	-	-	-	-	-	-	-	-	-	-	-	4424	4591	4724
W-4	2592	2781	2781	2844	2974	3105	3236	3461	3622	3749	3850	3974	4107	4235
W-3	2356	2555	2555	2588	2619	2810	2974	3071	3169	3263	3365	3496	3622	3622
W-2	2063	2233	2233	2297	2423	2555	2653	2750	2844	2945	3041	3137	3263	3263
W-1	1719	1971	1971	2136	2233	2328	2423	2523	2619	2716	2810	2911	2911	2911

Enlisted Members														
E-9	-	-	-	-	-	-	3015	3083	3153	3226	3298	3362	3538	3676
E-8	-	-	-	-	-	2528	2602	2670	2739	2812	2876	2946	3119	3258
E-7	1766	1906	1976	2046	2116	2183	2253	2323	2428	2497	2566	2600	2774	2912
E-6	1519	1656	1724	1798	1865	1933	2003	2107	2173	2243	2277	2277	2277	2277
E-5	1333	1451	1521	1587	1692	1761	1830	1898	1933	1933	1933	1933	1933	1933
E-4	1243	1313	1390	1497	1557	1557	1557	1557	1557	1557	1557	1557	1557	1557
E-3	1172	1236	1285	1336	1336	1336	1336	1336	1336	1336	1336	1336	1336	1336
E-2	1127	1127	1127	1127	1127	1127	1127	1127	1127	1127	1127	1127	1127	1127
E-1	1006	1006	1006	1006	1006	1006	1006	1006	1006	1006	1006	1006	1006	1006

Source: Defense Finance and Accounting Service, Kansas City Missouri

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APPENDIX B. 1 JULY 2000 MILITARY BASIC PAY TABLE (MONTHLY)

Commissioned Officers														
Rank	**<2**	**2**	**3**	**4**	**6**	**8**	**10**	**12**	**14**	**16**	**18**	**20**	**22**	**24**
O-10	-	-	-	-	-	-	-	-	-	-	-	10655	10707	10930
O-9	-	-	-	-	-	-	-	-	-	-	-	9320	9454	9648
O-8	6594	6810	6953	6993	7172	7472	7540	7825	7906	8150	8504	8830	9048	9048
O-7	5480	5852	5852	5894	6115	6282	6475	6669	6863	7472	7985	7985	7985	7985
O-6	4061	4462	4754	4754	4772	4977	5004	5004	5169	5791	6086	6381	6549	6719
O-5	3248	3814	4078	4127	4292	4292	4421	4659	4971	5286	5436	5584	5751	5751
O-4	2738	3334	3556	3606	3812	3980	4253	4464	4611	4758	4809	4809	4809	4809
O-3	2544	2844	3113	3365	3526	3702	3850	4040	4139	4139	4139	4139	4139	4139
O-2	2219	2527	2912	3009	3071	3071	3071	3071	3071	3071	3071	3071	3071	3071
O-1	1926	2005	2423	2423	2423	2423	242	2423	2423	2423	2423	2423	2423	2423

Commissioned Officers with over 4 years active service as enlisted or warrant officer														
O-3E	-	-	-	3365	3526	3702	3850	4040	4200	4291	4417	4417	4417	4417
O-2E	-	-	-	3009	3071	3169	3334	3461	3556	3556	3556	3556	3556	3556
O-1E	-	-	-	2423	2588	2684	2781	2878	3009	3009	3009	3009	3009	3009

Warrant Officers														
W-5	-	-	-	-	-	-	-	-	-	-	-	4475	4629	4783
W-4	2592	2789	2868	2947	3083	3217	3353	3485	3622	3754	3888	4019	4156	4289
W-3	2356	2555	2555	2588	2694	2814	2974	3071	3177	3298	3418	3539	3659	3780
W-2	2063	2233	2233	2305	2423	2555	2653	2751	2844	2949	3056	3164	3271	3278
W-1	1719	1971	1971	2136	2233	2332	2433	2533	2634	2734	2835	2911	2911	2911

Enlisted Members														
E-9	-	-	-	-	-	-	3015	3083	3169	3271	3373	3473	3609	3744
E-8	-	-	-	-	-	2528	2602	2670	2751	2840	2932	3026	3161	3296
E-7	1766	1928	2001	2073	2147	2220	2294	2367	2439	2514	2588	2660	2787	2962
E-6	1519	1678	1752	1824	1899	1973	2047	2119	2191	2244	2283	2283	2286	2286
E-5	1333	1494	1566	1640	1715	1789	1862	1936	1936	1936	1936	1936	1936	1936
E-4	1243	1373	1447	1520	1594	1594	1594	1594	1594	1594	1594	1594	1594	1594
E-3	1172	1261	1334	1336	1336	1336	1336	1336	1336	1336	1336	1336	1336	1336
E-2	1127	1127	1127	1127	1127	1127	1127	1127	1127	1127	1127	1127	1127	1127
E-1	1006	1006	1006	1006	1006	1006	1006	1006	1006	1006	1006	1006	1006	1006

Source: Defense Finance and Accounting Service, Kansas City Missouri

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APPENDIX C. ADDITIONAL AREAS FOR FURTHER STUDY

1. The pay gap (as defined by ECI and/or DECI) should have a broader perspective and include concepts such as pay processes, administration, and categories. Currently, the pay gap only reflects differentiated levels of remuneration between the military and civilian sector levels of pay.

2. Conduct an experiment allowing two similar military units to be compared; one unit under a pay-for-performance plan and the other as a control group.

3. Identification, exploration, and definition of an overall Human Resource Strategy, with an identified controlling body within DoD.

4. Research and identification of the "X Factor" as identified by the 8th QRMC.

5. Feasibility of providing different pay tables for specific military occupational specialties, skill levels, or education levels.

6. Impact study of QRMC benefit; is it worth the cost?

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LIST OF REFERENCES

7th Quadrennial Review of Military Compensation, Report of the Seventh QRMC, 7th QRMC,, 21 August 1992.

8th Quadrennial Review of Military Compensation (A), *8th QRMC Report on Intrinsic Motivation*, 8th QRMC Working Paper, 12 April 1996.

Air Force Association (AFA(A)), *1998 Personnel Policy Paper*, http:/www.afa.org/library/ Policy/98, p.16, 1998.

Air Force association (AFA(B)), *Lawmakers Consider Severing Civil Service, Military Pay Link.* Legislative Update, 31 March 1997.

Asch, Beth J. and Warner, John T., *A Theory of Military Compensation and Personal Policy,* The National Defense Research Institute, RAND Publication, 1994.

Asch, Beth J. and Warner, T., *Professionals on the Front Line; Two Decades of the All-Volunteer Force*, The National Defense Research Institute, Rand Publication, 1996.

Asch, Beth J. and others, *Reforming the Military Retirement System,* The National Defense Research Institute, RAND Publication, 1998.

Bloom, Matt and Milkovich, G.T., "Relationship Among Risk, Incentive Pay, and Organizational Performance," *Academy of Management Journal*, Volume 41, Number 3, pp. 283-297, June 1998.

Carter, Thomas J., "Are Wages Too Low? Empirical Implications of Efficiency Wage Models," *Southern Economic Journal,* Volume 65, Number 3, January 1999.

Cairncross, Frances, "Survey: Pay: A Fair Day's Pay, " *The Economist*, Volume 351, Number 8118, pp. S12-S14, 8 May 1999.

Conger, J. A. and Kanungo, R. N., "The Empowerment Process: Integrating Theory and Practice," *Academy of Management Review*, July, 1988.

Congressional Budget Office (CBO), *What Does the "Military Pay" Gap Mean?,* CBO Report, June 1999.

Cragg, M., "Performance Incentives in the Public Sector: Evidence from the Job Training Partnership Act," *Journal of Law, Economics, and Organization,* Volume 13, Number 1, April 1997.

Defense Finance and Accounting Service, *Actual Earnings Statements for Military Service Members*, 1999.

English, John A., *On Infantry*, Preager, New York, New York, 1981.

Greene, C.N., "Causal Connections Among Managers' Merit Pay, Job Satisfaction, and Performance," *Journal of Applied Psychology*, Vol. 58, 1973.

Harris, W.E., *Military Compensation and the All-Volunteer Force: Lessons Learned,* Master's Thesis, Naval Postgraduate School, Monterey, California, December 1994.

Heneman, H.G., "Impact of Performance on Managerial Pay Levels and Pay Changes," *Journal of Applied Psychology*, Vol. 58, 1973

Hodgetts, R.M., "Discussing Incentive Compensation with Donald Hastings of Lincoln Electric," *Compensation and Benefits Review,* Volume 29, Number 5, September/October 1997.

House Report, Number 105-532, 105th Congress, Second Session, 1998.

Institute of Management and Administration (IMA), "Pay for Performance Report," *Institute of Management and Administration Newsletter*, October 1999.

Krulak, Gen. Charles C., *A Challenge to Analysts in Complex, Uncertain Times*, Phalanx, Vol.30 No.3, September, 1997.

Langbein, I.L. and Lewis, B.L., "Pay, Productivity, and the Public Sector: The Case of Electrical Engineers," *Journal of Public Administration Research and Theory,* Volume 8, Number 3, pp.60-66, July 1998.

Lazear, E.P., "Performance Pay and Productivity: Working Paper 5672," *Working Paper Series: National Bureau of Economic Research, Inc.*, July 1996.

Lazear, E.P., *Personnel Economics for Managers*, John Wiley and Sons, New York, New York, 1998, p. 225.

Lott, Trent, Senate Majority Leader, Letter to Senator Ted Stevens on Military Concerns, August 1998.

MacDonald, D.J., "Mainstreaming Military Compensation: Problems and Perspectives," Master's Thesis, Naval Postgraduate School, Monterey, California, September 1998.

Magnusen, K.O., "Faculty Evaluation, Performance, and Pay," *Journal of Higher Education*, Vol. 58, 1987.

Maze, Rick, "Downward Spiral Worries Senate Leader," *Army Times*, 7 September 1998.

Moskos, Charles C., "The All-Volunteer Military: Calling, Profession, or Occupation," Parameters, Journal of the US Army War College, Volume VII, Number 1, pp.2-9, 1986.

Mintzberg, Henry, "Five Tips for Strategy," The Strategy Process: Concepts and Contexts, Prentice Hall, pp. 802-835, 1992.

Risher, H., "Why Your Pay Doesn't Stack Up," *Government Executive*, August, 1997.

Risher, H. and Fay, Charles H., *New Strategies for Public Pay: Rethinking Government Compensation Programs*, Jossey-Bass Publishers, 1997.

Robbert, A.A. and others, *Differentiation in Military Human Resource Management,* The National Defense Research Institute, RAND Publication, 1998.

Ruehlin, John, *Career Decision Counseling 2000, A Guide for Senior Navy Leadership*, Ruehlin Associates, Coronado, Ca., 2000.

Ruffin, Roy J. and Gregory, Paul R., *Principles of Economics, 2nd ed.*, Scott, Foresman, and Company, London, England, 1984.

Salisbury, Dallas L., *Retirement for the 21st Century, Ready or Not*, Employee Benefit Research Institute, 1994.

Senate Armed Services Committee, Sub-committee on Personnel, Hearing, *Senate Armed Services Holds Hearing on Military Pay and Compensation*, Washington, D.C. 3 March 1999.

Senge, P.M., *The Leader's New Work: Building Learning Organizations*, New York, 1990.

Tudor, T.R. and others, "Performance Appraisals and Pay-for-Performance Plans," *Journal of Compensation and Benefits,* Volume 12, Number 3, pp.41-46, November/December 1996.

U.S. Department of Defense (U.S. DoD), Office of the Secretary of Defense, *Military Compensation Background Papers, Compensation Elements and Related Manpower Cost Items, Their Purposes and Legislative Backgrounds*, Fourth Edition, Government Printing Office, November 1991.

U.S. Department of Defense, Office of the Actuary (U.S. DoD, OOA), Valuation of the Military Retirement System, Government Printing Office, 30 September 1996.

Wardynski, C., *Impact of military Service on Household Income*, Briefing to the Military Summit on Personal Financial Management, 16 December 1997.

BIBLIOGRAPHY

7th Quadrennial Review of Military Compensation, Report of the Seventh QRMC, 7th QRMC, 21 August 1992.

8th Quadrennial Review of Military Compensation (A), *8th QRMC Report on Intrinsic Motivation*, 8th QRMC Working Paper, 12 April 1996.

8th Quadrennial Review of Military Compensation.(B), *Forum on Strategic Human Resource Management*, Washington, D.C., 8th QRMC, 1996.

8th Quadrennial Review of Military Compensation (C), *Rewarding, Organizing, and Managing People for the 21st Century: Time for a Strategic Approach—Part I: A Strategic Perspective*. Washington, D.C., 8th QRMC, 30 Jun 1997.

8th Quadrennial Review of Military Compensation (D), *Rewarding, Organizing, and Managing People for the 21st Century: Time for a Strategic Approach—Part II: A Strategic Approach*. Washington, D.C., 8th QRMC, 30 Jun 1997.

8th Quadrennial Review of Military Compensation (C), *Rewarding, Organizing, and Managing People for the 21st Century: Time for a Strategic Approach—Part III: Managing Change*. Washington, D.C., 8th QRMC, 30 Jun 1997.

Air Force Association, *1998 Personnel Policy Paper*, http:/www.afa.org/library/Policy/98, p.16, 1998.

Air Force association, *Lawmakers Consider Severing Civil Service, Military Pay Link.* Legislative Update, 31 March 1997.

Alcott, Martin, *An Evaluation of Direct Cash Compensation in Lieu of Military Commissary Privileges,* Master's Thesis, Naval Postgraduate School, Monterey, California, December 1994.

Anonymous, "Business: Pay Purview," *The Economist.* August 1998.

Asch, Beth J., Designing Military Pay: Contributions and Implications of the Economic Literature, The National Defense Research Institute, RAND Publication, 1993.

Asch, Beth J., "Do Incentives Matter? The Case of Navy Recruiters," *Industrial and Labor Relations Review,* Volume 43, Number 3, 1990.

Asch, Beth J. and Warner, John T., *A Theory of Military Compensation and Personal Policy,* The National Defense Research Institute, RAND Publication, 1994.

Asch, Beth J. and Warner, T., *Professionals on the Front Line; Two Decades of the All-Volunteer Force*, The National Defense Research Institute, Rand Publication, 1996.

Asch, Beth J. and others, *Reforming the Military Retirement System,* The National Defense Research Institute, RAND Publication, 1998.

Bastian, C., "Active Learning with Monetary Incentives," *Review of Agriculture Economics,* Volume 19, Number 2, Fall and Winter 1997.

Binkin, M., *The Military Pay Muddle,* The Brookings Institute, 1975.

Binkin, M. and Kyriakopoulos, I., *Paying the Modern Military,* The Brookings Institute, 1981.

Bloom, Matt and Milkovich, G.T., "Relationship Among Risk, Incentive Pay, and Organizational Performance," *Academy of Management Journal*, Volume 41, Number 3, pp. 283-297, June 1998.

Butler, R., *Navy Training Policies: An Economic Perspective,* The Assessment Group, 1987.

Cairncross, Frances, "Survey: Pay: A Fair Day's Pay, " *The Economist*, Volume 351, Number 8118, pp. S12-S14, 8 May 1999.

Carter, Thomas J., "Are Wages Too Low? Empirical Implications of Efficiency Wage Models," *Southern Economic Journal,* Volume 65, Number 3, January 1999.

Congressional Budget Office, *What Does the "Military Pay" Gap Mean?,* CBO Report , June 1999.

Conger, J. A. and Kanungo, R. N., "The Empowerment Process: Integrating Theory and Practice," *Academy of Management Review*, July, 1988.

Cejka, S., "Incentive-Based Compensation," *Healthcare Executive,* Volume 13, Number 6, November/December 1998.

Cragg, M., "Performance Incentives in the Public Sector: Evidence from the Job Training Partnership Act," *Journal of Law, Economics, and Organization,* Volume 13, Number 1, April 1997.

Dickinson, A.M., "A Comparison of the Effects of Two Individual Monetary Incentive Systems on Productivity: Piece Rate Pay versus Base Pay plus Incentives," *Journal of Organizational Behavior Management*, Volume 14, Number 1, 1993.

English, John A., *On Infantry*, Preager, New York, New York, 1981.

Ganzel, R., "What's Wrong with Pay-for-performance?" *Training,* Volume 35, Number 12, December 1998.

Greene, C.N., "Causal Connections Among Managers' Merit Pay, Job Satisfaction, and Performance," *Journal of Applied Psychology*, Vol. 58, 1973.

Harris, W.E., *Military Compensation and the All-Volunteer Force: Lessons Learned,* Master's Thesis, Naval Postgraduate School, Monterey, California, December 1994.

Hein, K., "SMART Incentives," *Incentive,* Volume 173, Number 2, February 1999.

Hodgetts, R.M., "Discussing Incentive Compensation with Donald Hastings of Lincoln Electric," *Compensation and Benefits Review,* Volume 29, Number 5, September/October 1997.

House Report, Number 105-532, 105th Congress, Second Session, 1998.

Hedges, R.M., "Ultimate Rewards: What Really Motivates People to Achieve," *Organizational Dynamics,* Volume 26, Number 3, Winter 1998.

Heneman, H.G., "Impact of Performance on Managerial Pay Levels and Pay Changes," *Journal of Applied Psychology*, Vol. 58, 1973

Heneman, Robert L., *Merit Pay: Linking Pay Increases to Performance Ratings*, Addison-Wesley Publishing Company, 1992

Hosek, J.R. and others, *Military Pay Gaps and Caps,* The National Defense Research Institute, RAND Publication, 1994.

Institute of Management and Administration (IMA), "Pay for Performance Report," *Institute of Management and Administration Newsletter*, October 1999.

Fastener, K.A., Career Intentions of Junior Unrestricted Line Naval Officers, Master's Thesis, Naval Postgraduate School, Monterey, California, March 1997.

Katz, M.G., "So, What's my Motivation? Employee Incentives in a Changing Industry," *American Gas,* Volume 80, Number 1, February 1998.

Kesselman, G.A., "Relationship Between Performance and Satisfaction Under Contingent and Non-Contingent Reward System," *Journal of Applied Psychology,* Volume 59, Number 3, pp. 374-376, 1974.

Kirby, S.N. and Thie, H.J., "'Managing' The Enlisted Force: Whistling in the Wind," *Armed Forces and Society*, Volume 24, Number 4, pp. 567-587, Summer 1998.

Kirby, S.N. and Thie, H.J., *Enlisted Personnel Management: A Historical Perspective*, The National Defense Research Institute, Rand Publication. 1996.

Krulak, Gen. Charles C., *A Challenge to Analysts in Complex, Uncertain Times*, Phalanx, Vol.30 No.3, September, 1997.

Langbein, I.L. and Lewis, B.L., "Pay, Productivity, and the Public Sector: The Case of Electrical Engineers," *Journal of Public Administration Research and Theory,* Volume 8, Number 3, July 1998.

Lazear, E.P., "Performance Pay and Productivity: Working Paper 5672," *Working Paper Series: National Bureau of Economic Research, Inc.*, July 1996.

Lazear, E.P., *Personnel Economics for Managers*, John Wiley and Sons, Inc., New York, New York, 1998.

Lazear, E.P. and Rosen, Sherwin, "Rank-Order Tournaments as Optimum Labor Contracts," *Journal of Political Economy* 89 (October 1981), p. 841-864.

Loftus, G., "Ultimate Pay-for-performance," *Across the Board,* Volume 34, Number 1, January 1997.

Lott, Trent, Senate Majority Leader, Letter to Senator Ted Stevens on Military Concerns, August 1998.

MacDonald, D.J., "Mainstreaming Military Compensation: Problems and Perspectives," Master's Thesis, Naval Postgraduate School, Monterey, California, September 1998.

Magnusen, K.O., "Faculty Evaluation, Performance, and Pay," *Journal of Higher Education*, Vol. 58, 1987.

Maze, Rick, "Downward Spiral Worries Senate Leader," *Army Times*, 7 September 1998.

Moore, W.C., "The Military Must Revive Its Warrior Spirit," *The Wall Street Journal,* p. 22, 27 October 1998.

Moskos, Charles C., "The All-Volunteer Military: Calling, Profession, or Occupation," *Parameters, Journal of the US Army War College*, Volume VII, Number 1, pp.2-9, 1977.

Mintzberg, Henry, "Five Tips for Strategy," The Strategy Process: Concepts and Contexts, Prentice Hall, 1992.

Public Management Occasional Papers, *Performance Pay Schemes for Public Sector Managers: An evaluation of the Impacts*, Organization for Economic Co-Operation and Development, OECD Publishers, 1997.

Office of the Secretary of Defense, *Military Compensation Background Papers: Compensation Elements and Related Manpower Cost Items, Their Purpose and Legislative Backgrounds*, 4th Edition, Department of Defense Publishing, November 1991.

Pendegast, C., "What Happens Within Firms? A Survey of Empirical Evidence on Compensation Policies," *National Bureau of Economic Research Working Paper: 5802,* October 1996.

Risher, H., "Why Your Pay Doesn't Stack Up," *Government Executive*, August, 1997.

Risher, H., "Rethinking Base Pay Programs: New Needs, New Models, New Strategies," *Compensation and Benefits Management,* Volume 12, Number 4, pp. 7-16, Autumn 1996.

Risher, H. and Fay, Charles H., *New Strategies for Public Pay: Rethinking Government Compensation Programs*, Jossey-Bass Publishers, 1997.

Robbert, A.A. and others, *Differentiation in Military Human Resource Management,* The National Defense Research Institute, RAND Publication, 1996.

Rosen, S., "The Military as an Internal Labor Market: Some Allocation, Productivity, and Incentive Problems," *Social Science Quarterly,* Volume 73, Number 2, June 1992.

Ruehlin, John, *Career Decision Counseling 2000, A Guide for Senior Navy Leadership*, Ruehlin Associates, Coronado, Ca., 2000.

Ruffin, Roy J. and Gregory, Paul R., *Principles of Economics, 2nd ed.*, Scott, Foresman, and Company, London, England, 1984.

Seiler, E., "Piece Rate vs. Time Rate: The Effect of Incentives on Earnings," *The Review of Economics and Statistics,* Volume LXVI, Number 3, August 1984.

Senate Armed Services Committee, Sub-committee on Personnel, Hearing, *Senate Armed Services Holds Hearing on Military Pay and Compensation*, Washington, D.C. 3 March 1999.

Senge, P.M., *The Leader's New Work: Building Learning Organizations*, New York, 1990.

Smith, R.S. and others, *Modern Labor Economics,* Addison Wesley, 1997.

Skelton, B.R. and Yandle, B., "Piece Rate Pay," *Journal of Labor Statistics,* Volume 3, Number 2, Spring 1982.

Tudor, T.R. and others, "Performance Appraisals and Pay-for-Performance Plans," *Journal of Compensation and Benefits,* Volume 12, Number 3, November/December 1996.

U.S. Department of Defense, Office of the Secretary of Defense, Military Compensation Background Papers, Compensation Elements and Related Manpower Cost Items, Their Purposes and Legislative Backgrounds, Fourth Edition, Government Printing Office, November 1991.

U.S. Department of Defense, Office of the Actuary (U.S. DoD, OOA), Valuation of the Military Retirement System, Government Printing Office, 30 September 1996.

Wensky, A.H. and Legendre, R.J., "Incentive Training at First Service Bank," *Personnel Journal,* Volume 68, Number 4, April 1989.

Woods, M.T., "Relationships Between Performance and Satisfaction Under Contingent and Non-contingent Reward Systems," *Journal of Applied Psychology,* Volume 59, Number 3, March 1974.

Wardynski, C., *Impact of military Service on Household Income*, Briefing to the Military Summit on Personal Financial Management, 16 December 1997.

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